

University of Kentucky

UKnowledge

---

Theses and Dissertations--Communication  
Sciences and Disorders

Communication Sciences and Disorders

---

2015

## Dialect and Word Learning: Are Phonological Properties Maintained when Dialectal Influence Changes Word Meaning?

Heather C. Iwinski

University of Kentucky, [heather.iwinski@gmail.com](mailto:heather.iwinski@gmail.com)

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

### Recommended Citation

Iwinski, Heather C., "Dialect and Word Learning: Are Phonological Properties Maintained when Dialectal Influence Changes Word Meaning?" (2015). *Theses and Dissertations--Communication Sciences and Disorders*. 7.

[https://uknowledge.uky.edu/commdisorders\\_etds/7](https://uknowledge.uky.edu/commdisorders_etds/7)

This Master's Thesis is brought to you for free and open access by the Communication Sciences and Disorders at UKnowledge. It has been accepted for inclusion in Theses and Dissertations--Communication Sciences and Disorders by an authorized administrator of UKnowledge. For more information, please contact [UKnowledge@lsv.uky.edu](mailto:UKnowledge@lsv.uky.edu).

## **STUDENT AGREEMENT:**

I represent that my thesis or dissertation and abstract are my original work. Proper attribution has been given to all outside sources. I understand that I am solely responsible for obtaining any needed copyright permissions. I have obtained needed written permission statement(s) from the owner(s) of each third-party copyrighted matter to be included in my work, allowing electronic distribution (if such use is not permitted by the fair use doctrine) which will be submitted to UKnowledge as Additional File.

I hereby grant to The University of Kentucky and its agents the irrevocable, non-exclusive, and royalty-free license to archive and make accessible my work in whole or in part in all forms of media, now or hereafter known. I agree that the document mentioned above may be made available immediately for worldwide access unless an embargo applies.

I retain all other ownership rights to the copyright of my work. I also retain the right to use in future works (such as articles or books) all or part of my work. I understand that I am free to register the copyright to my work.

## **REVIEW, APPROVAL AND ACCEPTANCE**

The document mentioned above has been reviewed and accepted by the student's advisor, on behalf of the advisory committee, and by the Director of Graduate Studies (DGS), on behalf of the program; we verify that this is the final, approved version of the student's thesis including all changes required by the advisory committee. The undersigned agree to abide by the statements above.

Heather C. Iwinski, Student

Dr. Joneen Lowman, Major Professor

Dr. Jodelle Deem, Director of Graduate Studies

DIALECT AND WORD LEARNING: ARE PHONOLOGICAL PROPERTIES MAINTAINED  
WHEN DIALECTAL INFLUENCE CHANGES WORD MEANING?

---

THESIS

---

Committed in partial fulfillment of the requirements for the degree of Master  
of Communication Sciences and Disorders in the  
College of Health Sciences and the University of Kentucky

By

Heather Iwinski

Lexington, Kentucky

Director: Dr. Joneen Lowman, PhD

Lexington, Kentucky

2015

Copyright © Heather Iwinski 2015

## ABSTRACT OF THESIS

### DIALECT AND WORD LEARNING: ARE PHONOLOGICAL PROPERTIES MAINTAINED WHEN DIALECTAL INFLUENCE CHANGES WORD MEANING?

Word learning requires the accurate encoding and decoding of a word's phonological and semantic properties. Errors in establishing an accurate phonemic-semantic connection can hinder accurate word comprehension and use. Geographical location, culture, and ethnicity can affect the phonology used by a speaker referred to as dialect. African American Vernacular English (AAVE) is one of the most commonly used dialects in the United States. In addition to grammatical changes AAVE is characterized by phonemic changes. The current study sought to determine the effects of AAVE use on the receptive and expressive learning of nonsense words that differ in meaning as noted by a single phonological difference. Four African American children in grades one and two were taught 12 minimal pairs of nonsense words. Three of the four children were identified as non AAVE speakers and one child was identified as an AAVE speaker. Each word in the pair had a specific meaning and each pair differed by a single phonological property reminiscent of AAVE dialect. Four sets of minimal pairs were taught across three consecutive days. Results indicate better performance on receptive measures than on expressive measures across all children. Analysis of error types did not detect a higher percentage of errors due to AAVE between the two groups of children.

**KEYWORDS:** dialect, African American Vernacular English, word learning, vocabulary, AAVE

Heather Iwinski

---

Student's Signature

4-10-15

---

Date

DIALECT AND WORD LEARNING: ARE PHONOLOGICAL PROPERTIES MAINTAINED  
WHEN DIALECTAL INFLUENCE CHANGES WORD MEANING?

By

Heather Iwinski

Dr. Joneen Lowman

---

Director of Thesis

Dr. Jodelle Deem

---

Director of Graduate Studies

4-10-15

---

Date

## ACKNOWLEDGMENTS

The following thesis, while an individual work, benefitted from the insights, encouragement, and direction of several individuals. My thesis chair, Dr. Joneen Lowman provided substantial assistance, support, and mentorship throughout this project. Her creativity, high achievement standards, and perseverance are something I greatly admire, and hope to emulate some day. Dr. Lowman instilled within me a passion for asking and answering difficult questions, which I know will serve me well throughout my career. Additionally, Dr. Jodelle Deem, and Dr. Robert Marshall, the other members of my thesis committee provided me with valuable comments and suggestions throughout the thesis process, including guidance on creation of materials, data collection, and the written work itself.

I would like to extend thanks to all professors and clinical supervisors I have had while completing my degree at the University of Kentucky. They have provided me with an extensive knowledge base, which will benefit me greatly as I continue on in the field of speech-language pathology. Specifically, I would like to thank the entirety of the Voice and Swallow Clinical Team, who have helped me tremendously in finding my passion, and encouraged me to pursue further education and specialization after the completion of my Master's Thesis.

A huge thank you to Kelly Power, without whom, my study would have no inter-rater reliability. Despite searching for jobs and interviewing across the country, she watched 14 hours of videos, completed numerous pages of checklists, and transcribed verbal responses from my study participants.

Equal thanks are extended to the participants, families, and after-school staff at William-Wells Brown Elementary, without whom this thesis would not exist. I would also like to thank

Abigail Lowman, for participating in a trial run of therapy tasks and providing ideas for refinement.

Finally, exceptional thanks are extended to my loved ones. To Erin Salmons, and Kay Taei, you women helped me immeasurably. Your support has been crucial to the completion of this project with my sanity (somewhat) intact. To my parents, Lesley and Chip Iwinski, your love, encouragement, and understanding have constantly surrounded me, and I cannot thank you enough for your aid in achieving my educational goals. To my grandmother, Alice Iwinski, for always having words of guidance when I needed them most. To my siblings, Alyssa and Henry Iwinski, your empathy and kindness continues to amaze me, and I am so lucky to have you as confidants and friends. To my boyfriend, Austin Goff, your patience, humor, and endless compassion contributed immensely to the completion of this project. And finally, to my dog Blue, for being the perfect companion to sit in silence with while completing this thesis. I am incredibly fortunate to have the support from this amazing group of people, in addition to many others. “Idź Z Bogiem.”

## TABLE OF CONTENTS

Acknowledgments.....	iii
Table of Contents.....	v
List of Tables.....	vii
Chapter One: Introduction.....	1
Background.....	1
Vocabulary Learning.....	1
Phonology and Word Learning.....	4
Influence of Dialect on Word Learning.....	4
African American Vernacular English.....	5
Vocabulary, Dialect and Academic Achievement.....	7
Chapter Two: Methods.....	9
Research Design.....	9
Participants.....	9
Qualifying.....	10
Setting.....	11
Materials/ Stimuli.....	11
Words.....	11
Instruction.....	13
Measures.....	15
Definition task (Expressive/ Receptive).....	15
Structured production task (Expressive).....	16
Identification task (Receptive).....	17
Procedure.....	17
Qualifying.....	18
Experimental Task.....	18
Posttest.....	18
Treatment Fidelity and Reliability.....	18
Chapter Three: Results.....	19
Scoring Reliability.....	19
Participant A-1.....	19
Learning Checks.....	20
Definition Task (Receptive/Expressive).....	21
Structured Production Task (Receptive/ Expressive).....	23
Identification Task (Receptive).....	24
Participant A-2.....	25
Learning checks.....	25
Definition Task (Receptive/ Expressive).....	26
Structured Production Task (Receptive/ Expressive).....	28



Identification Task (Receptive).....	29
Participant A-3 .....	30
Learning checks. ....	30
Definition Task (Receptive/ Expressive).....	31
Structured Production Task (Receptive/ Expressive). ....	32
Identification Task (Receptive).....	33
Participant B-1 .....	34
Learning Checks. ....	34
Definition Task (Receptive/ Expressive).....	35
Structured Production Task (Receptive/ Expressive). ....	37
Identification Task (Receptive).....	38
Chapter Four: Discussion and Implications .....	40
The Definition Task. ....	40
The Structured Production Task. ....	41
The Identification Task. ....	41
Limitations .....	42
Implications.....	43
Appendix.....	45
Appendix A: Line Drawings and typed orthography of nonsense words .....	45
Appendix B: Complete Script.....	50
Appendix C: Checklists used for Interrater Reliability/ Treatment Fidelity.....	104
References .....	158
Vita.....	162

## LIST OF TABLES

- Table 2.1, Nonsense Words, IPA notation, Word structure, and Feature of AAVE  
Table 3.1, Participants' performance on qualifying measures  
Table 3.2, Participant A-1's performance on learning checks across sessions  
Table 3.3, Participant A-1's performance on the definition task across sessions  
Table 3.4, Participant A-1's errors on the definition task by type and modality across sessions  
Table 3.5, Participant A-1's performance on the structured production task across sessions  
Table 3.6, Participant A-1's errors on the structured production task by type and modality across sessions  
Table 3.7, Participant A-1's performance on the identification task across sessions  
Table 3.8, Participant A-1's errors on the identification task by type across sessions  
Table 3.9, Participant A-2's performance on learning checks across sessions  
Table 3.10, Participant A-2's performance on the definition task across sessions  
Table 3.11, Participant A-2's errors on the definition task by type and modality across sessions  
Table 3.12, Participant A-2's performance on the structured production task across sessions  
Table 3.13, Participant A-2's errors on the structured production task by type and modality across sessions  
Table 3.14, Participant A-2's performance on the identification task across sessions  
Table 3.15, Participant A-2's errors on the identification task by type across sessions  
Table 3.16, Participant A-3's performance on learning checks across sessions  
Table 3.17, Participant A-3's performance on the definition task across sessions  
Table 3.18, Participant A-3's errors on the definition task by type and modality across sessions  
Table 3.19, Participant A-3's performance on the structured production task across sessions  
Table 3.20, Participant A-3's errors on the structured production task by type and modality across sessions  
Table 3.21, Participant A-3's performance on the identification task across sessions  
Table 3.22, Participant A-3's errors on the identification task by type across sessions  
Table 3.23, Participant B-1's performance on learning checks across sessions  
Table 3.24, Participant B-1's performance on the definition task across sessions  
Table 3.25, Participant B-1's errors on the definition task by type and modality across sessions  
Table 3.26, Participant B-1's performance on the structured production task across sessions  
Table 3.27, Participant B-1's errors on the structured production task by type and modality across sessions  
Table 3.28, Participant B-1's performance on the identification task across sessions  
Table 3.29, Participant B-1's errors on the identification task by type across sessions

## **CHAPTER ONE: INTRODUCTION**

### **Background**

Vocabulary knowledge contributes to lifelong success. The ability to use semantic features has been linked to cognitive development in children as young as 12 months (Owens 2008). Word learning, retention, and retrieval allows children to use and develop their cognitive capacity, create strategic memory behaviors, and systematically organize information (Owens 2008). Word learning continues to be important as children grow. In school-age children, vocabulary knowledge has been found to be an essential contributor to academic success, principally in the area of reading comprehension (Spencer & Schuele 2012). Behling (2008) found that “intelligence” is an excellent predictor of performance in various jobs across a number of situations and positions. This same study noted that vocabulary knowledge was crucial, as some “critics argue that some measures of intelligence are little more than disguised tests of vocabulary and reading ability” (Behling 1998). Vocabulary knowledge is paramount throughout all stages of life.

### **Vocabulary Learning**

The ability to add new vocabulary words is a necessary skill for any individual. Learning new words requires two separate skills: acquiring the auditory pattern that represents a word (the phonemic property), and learning the concept to which the word refers (the semantic property) (McMurray 2007). Carey and Bartlett (1978), define word learning as when a child is able to associate phonetic input with an object or action that exists in their environment. Simply put, these two skills are necessary to add a word to an individual’s lexicon.

Phonological and semantic development begin as soon as a child is born. When a child hears speech sounds, or phonemes, neurons in the auditory system are fired. These neurons are fired repetitively, any time the child comes into contact with that sound. This builds a connection in the child's auditory cortex as well as their temporal lobe. Once these connections have been constructed, a child becomes able to recognize and then understand words. This usually occurs around 7 months of age (Owens 2008). At this time, the child not only receives phonological information, but is able to connect these phonemes with an item in their environment (Owens 2008). Attributing sounds to a physical item implies that the child understands the definition, or semantics, of the word. A child learns semantics from linking items to the phonemes that they hear on an everyday basis from their caregivers. Without the connection between phonology and semantics, an individual would be unable to correctly identify sounds, recognize the word, and know to what the speaker is referring. Without this connection, word learning, recognition, and retrieval would not be possible.

Being exposed to the auditory input and the referent allow fast mapping to take place. Fast mapping has been established as a possible "first stage" of the word learning process. Fast mapping occurs when a child uses both linguistic and non-linguistic inputs in order to make initial associations between words and their referents (Spencer & Schuele 2012). This kind of an association may also be referred to as an individual adding a word to their receptive vocabulary. Receptive vocabulary may be explained as a word that an individual recognizes, and understands, but may not be able to define easily. However, this is just the beginning in the word learning process. In order for the word to be added to an individual's lexicon, they must have additional exposures to the word. This process of gaining knowledge through exposures or instruction is known as refinement. Refinement can also be explained as "extended mapping"

(Carey 1978), which is the process of learning new words through a rough example of the word's meaning, and adding additional information to that definition as they are exposed to it. Once this occurs, an individual can add this new word to their expressive vocabulary. Expressive vocabulary refers to the vocabulary a person is able to use correctly in conversation or writing. Before a person is able to expressively use words in conversation, the word must be in their receptive inventory. Receptive vocabulary is always greater than expressive vocabulary, and this starts from a very young age (Bauman-Waengler 2012). For example, the average 12-month-old child can express 50 words, but understands 200. This continues to grow exponentially, as a child between 24-36 months of age can say 150-300 words but understands approximately 1200 (Bauman-Waengler 2012). Retention of this new word is able to take place once an individual uses fast mapping followed by extended mapping, or refinement. For example, Wise, Sevick, Morris, Lovett, & Wolf (2007), explained receptive vocabulary as words where a link exists between stored phonological properties, and expressive vocabulary as the ability to not only link to these stored properties, but to access and retrieve them. So, it may be understood that fast-mapping words add them to a person's receptive vocabulary, while after refinement or "extended mapping" has occurred, it may be considered a part of the person's expressive vocabulary, because they are able to access and retrieve the phonemic and semantic properties of that word.

Phonemic and semantic skills are both necessary to learn a new word. However, not everyone pronounces words in the same way. This variation in pronunciation, which can be a result of a dialect, could easily change the way we hear, and therefore learn, the phonemic properties of a word. This study aims to explore whether or not dialectal influence has an impact on a participant's ability to phonologically code and store minimal pairs of vocabulary words with dialect sensitive features.

## **Phonology and Word Learning**

Phonology is defined by Owens as “the aspect of language concerned with the rules governing the structure, distribution, and sequencing of speech sounds and the shape of syllables (Owens 2008). There are a certain number of phonemes present in the English language (approximately 43), that are used in certain combinations to create words. Where these sounds are placed within the syllabalic structure of a word is governed by phonology. For example, the English phoneme /z/, as in the word Asia (/ɑzə/), appears in the medial position of English words, but never at the onset of a word. This is an example of phonology- the rules that govern which phonemes may go in what order.

## **Influence of Dialect on Word Learning**

The encoding of a new word’s phonological features is influenced by the speakers in a child’s environment. If a parent living in Boston derhoticizes the /r/ sound in “car”, the child is likely to encode this same production. Thereby, for this child, the expressive production of /kar/ becomes [ka]. This loss of /r/ coloring by individuals living in the northeastern United States is referred to as dialect. Dialect refers to “a regional variety of language distinguished by features of vocabulary, grammar, and pronunciation from other regional varieties and constituting together with them a single language” (Merriam- Webster). As explained in the previous scenario, the expressive production of a word may differ from person to person due to the influence of their environment. This is the [to<sup>u</sup>me<sup>l</sup>to<sup>u</sup>] versus [to<sup>u</sup>mato<sup>u</sup>] argument that has been referred to for decades. While Standard America English (SAE) is the prevailing dialect children are taught in schools, there are many different dialects present in the United States. There are no statistics about individual dialect use in America, however, the American Heritage Dictionary of the English Language has explained that “everyone speaks some form of regional dialect”

(Kanaley 2002). A regional dialect is spoken in one particular area of the country, and is shared by individuals in that community. This dialect refers not only to the way these people may sound (for example, a Texan versus a New Yorker), but the grammatical features of the way these individuals speak. Grammar is included within the realm of dialect, but for the purposes of this study, only phonemic differences will be explored.

Although everyone speaks using a dialect, some dialects that encompass a larger regional or social group have been studied in regards to different educational contexts. Some of the most commonly researched dialects include African American Vernacular English (Patton-Terry & Connor 2010), Latino English (Carter 2007), and Appalachian English (Reynolds & Fish 2010). These dialects fall under an umbrella term “Non Mainstream American English”, or NMAE. Due to the fact that SAE is taught in schools, NMAE dialects have been studied in order to measure a dialect’s impact on academic success. These NMAE dialects have been studied in different contexts including their influence on emerging literacy (Terry 2012), potential influence on spelling (Patton-Terry & Connor 2010), oral narrative skills (Terry, Mills, Bingham, Mansour, Marencin 2013), and relation to reading achievement (Charity, Scarborough, Griffin 2004). However, a relationship between NMAE dialect and vocabulary acquisition has never been explored.

### **African American Vernacular English**

One of the most recognized and researched dialects is African American Vernacular English (AAVE). AAVE is a rule-based, systematic dialect characterized by features that are often phonemic in nature. The use of AAVE is influenced by gender, age, and socioeconomic status. (Bauman-Waengler 2012) Younger individuals, males, and those from a lower socioeconomic status have been shown to use AAVE more frequently. It is important to note that

although this study focuses on the phonological features of this dialect, AAVE is characterized by both morphological and syntactic differences as well. For example, the use of multiple negation (“I don’t got none of that”), the lack of a copula or auxiliary (“How you do this?”), and subject-verb agreement (“What do this mean?”) are examples of different grammatical structures identified by AAVE speaking preschoolers (Washington & Craig 1994).

According to Craig, Thompson, Washington, and Potter (2003), the most common phonological features are substitutions, reductions, or deletions. These AAVE phonological feature changes are as follows: substitution of /θ/ and /ð/ with /t/ and /d/ in prevocalic positions (e.g. ðæt → dæt), and /f/, /t/, and /v/ in postvocalic positions (e.g. wɪθ → wɪf), consonant cluster reduction (e.g. profɛsə → pofɛsə), and postvocalic consonant reduction or deletion of consonant singles following vowels (e.g. wəld → wəl). These phonemic replacements are an example of phonology within AAVE. This dialect is governed by these rules: where replacements of certain sounds for another are accepted.

The differences in phonological rules between SAE and AAVE have been explored in regards to different educational contexts. Terry and Connor (2010) found a statistically significant, though weak, correlation between AAVE use and spelling words that differ between AAVE and Standard American English (SAE) by second graders. These children were more likely to misspell words with dialect sensitive features (e.g. items /θ/ or /ð/). In this study, although significant data was obtained, it was found that reading achievement was a stronger predictor of spelling ability. Reading achievement and dialect in AAVE users have been studied as well (Terry, Connor, Petscher & Conlin 2012), which extended prior reports of a significant association between NMAE use and reading skills in young children. This study found that



children who strongly used a dialect (versus moderately) had more difficulty with expressive vocabulary and nonword repetition skills than their peers.

### **Vocabulary, Dialect and Academic Achievement**

Currently, 39% of children living in poverty in the United States are African American (“Children in Poverty”, 2013). In 1995, Hart and Risely brought attention to the fact that many low-income children begin school with limited vocabularies. Further studies on the subject revealed a prominent theme of vocabulary knowledge as a predictor for reading comprehension, and overall academic success (Cunningham & Stanovich 1997; Ricketts, Nation, & Bishop, 2007; Hemphill & Tivnan, 2008). The number of African American children in the US at or above proficient reading level is 17% for the fourth grade, and 15% for eighth grade. (“What proportions of student groups”, 2013). The connection between vocabulary knowledge and reading comprehension is undeniable, and has been identified to correlate in many studies (Carroll, J.B., 1993; Whitehurst & Lonigan, 1998). As of 2013, 80% of children receiving free or reduced lunch were below proficient in reading (“Forth graders who scored”, 2014), which reaffirms the connection between low socio-economic status and reading achievement. If vocabulary acquisition requires phonemic and semantic knowledge, and a dialect is interfering with the acquisition of phonemic knowledge, then these low- socioeconomic status children are at a disadvantage to acquiring vocabulary; which may be hindering their overall academic success. This study will explore the potential influence of dialect on maintaining phonological properties of newly acquired words.

African American Vernacular English was selected to complete this study due to its phoneme-heavy dialect differences from SAE, as mentioned previously. The phonological rules of AAVE make it possible to determine what kind of substitutions, if any, an individual may

make in a given word. In addition, AAVE was selected due to the finding that all African American participants in a study entered public school in Metropolitan Detroit speaking AAVE (Craig, Thompson, Washington, Porter 2003). This suggests that a large portion of the school-age population could be speaking an AAVE dialect, as the census reported that 16% of children enrolled in public schools are African American (“Enrollment and percentage distribution”, 2013).

Due to the nature of AAVE, which results in phoneme changes from SAE production to AAVE production, the phonological portion of word learning could be affected. When learning a new word, knowing the phonological properties of that word, and being able to retrieve them are crucial. This is the most important reason for selecting AAVE as the dialect to research during this study. Because word learning requires developing an accurate and precise phonemic-semantic connection, dialect usage may cause the phonemic properties to be altered. Exploring that possibility is important, as it is well documented that on average, African American children from low-income households perform poorly academically.

This study will aim to answer the following questions: (1) do children identified as speakers of AAVE receptively maintain the phonological form of a newly learned word when AAVE influenced phonological changes would change the words meaning?, and (2) do children identified as speakers of AAVE expressively maintain the phonological form of a newly learned word when AAVE influenced phonological changes would change the words meaning? The hypothesis of this study is that some of the more common phonological features of AAVE will result in a receptive and expressive differentiation between dialect sensitive minimal-pair words, due to dialectal interference on phonological coding.

## CHAPTER TWO: METHODS

### Research Design

This study used a two group, nonrandom post-test only format to assess learning of minimal pairs of nonsense words taught by the PI over a three day period. The study was approved by the University of Kentucky Medical Institutional Review Board.

### Participants

A total of four African-American children were recruited through after school programs operating in an urban city in the southeast United States. Three participants were girls, one of which was in the 1<sup>st</sup> grade and the remaining 2 were in the 2<sup>nd</sup> grade. The fourth participant was a male in the 2<sup>nd</sup> grade. The female participants were all identified as being mainstream speakers of English, and the male was identified as an AAVE user. Participant consent was collected according to University IRB approved protocol. In order to recruit participants, IRB protocol was approved by the Central Kentucky YMCA, and Parks and Recreation. Flyers were given to the YMCA for distribution. Additionally, three community centers were visited in the Lexington Area (William Wells Brown, Castleton, and Kenwood) where flyers were distributed and the primary investigator made herself available for any questions pertaining to the study. Flyers were posted in the University of Kentucky Communication Disorders Clinic, and distributed to the Director of Pediatric Ambulatory Operations at UK to be posted in other UK clinics. Flyers were provided to the UK Internal Communication Director for further distribution throughout the hospital. Stars Inc., a non-profit in Lexington focusing on educating at risk youth through after school programming and reading based activities distributed flyers. The primary investigator was invited to recruit participants at a basketball practice located at St. Luke's Methodist Church through the Upward Sports program.

## **Qualifying**

To be eligible for participation, the following criteria had to be met. First, a child had to be in the first or second grade. According to Craig and colleagues (2003), dialect density measures (DDM) are the strongest at the second grade level, and weaken from a mean of .056 to .016 by the time a child reaches fifth grade. Second, the child had to be performing on grade level in academics and not be receiving special education services as reported by guardian. Third, hearing, speech, and language had to be within normal limits. Hearing was screened according to recommended guidelines by the American Speech-Language Hearing Association (ASHA Panel on Audiologic Assessment, 5, IV.). Speech production was assessed using the Goldman Fristoe Test of Articulation-2 (GFTA-2; Goldman & Fristoe 2000). The GFTA-2 assesses speech sound production at the word level by asking a child to name pictures. The GFTA-2 was administered to control for the effects an articulation disorder could have on word learning. Because the number of speech sounds acquired is not a linear development, standard scores are not appropriate for determining a disorder. Instead, the percentile rank 38 was used, which required the child to make 5 or fewer errors on the test. This percentile rank was chosen because it allowed for the presence of developmentally expected articulatory errors. Errors due to dialect were counted as correct; though production of these phonemes was assessed using the stimulability section to verify that the child had the ability to produce the phoneme.

Language was assessed using two measures, the Peabody Picture Vocabulary Test (PPVT-4; Dunn, L.M. & Dunn D.M. 2007), and The Diagnostic Evaluation of Language Variation Screener (DELV Screener; Seymour, Roeper, deVilliers, deVilliers, 2003). The PPVT-4 assesses receptive, single word vocabulary which has shown to correlate with response to vocabulary instruction (Coyne, McCoach, Kapp, 2007; Kan & Windsor, 2010). To qualify, a

child's standard score had to fall within one standard deviation ( $SD = 15$ ) of the mean ( $x = 100$ ). The DELV Screener is appropriate for screening language and for gauging a person's degree of language variation from Mainstream American English (MAE). The DELV Screener does not utilize standard scores and or percentile ranks to mark performance; rather, labels specifying risk of a language disorder (*lowest risk, low to medium risk, medium to high risk, and highest risk*) and deviation from MAE (*MAE, Some Variation from MAE, and Strong Variation from MAE*) are assigned based on raw scores. Participants were divided into two groups based on language variation (Variation from MAE, and MAE). These categories are based on the definitions provided by the DELV, where variation is defined as five or more Non-MAE responses on the DELV, and MAE is defined as nine or greater responses of MAE on the DELV. The categorization between high variation and low variation varies slightly depending on the participant's age, for example, if a 6-year-old and an 8-year-old give the same number of Non-MAE responses on the DELV screener, they may be placed into different groups. These scores will be determined from completion of the DELV Screener.

## **Setting**

For two participants, study related activities occurred during the after school program at a time designated by the program staff. Activities occurred in a quiet environment, free from distractions. The remaining two participants' families' elected to have the study activities take place in their homes. Study activities occurred in a room separate from ongoing activity in the home so that the participants were in a distraction-free, quiet environment.

## **Materials/ Stimuli**

### **Words.**

Twelve nonsense, minimal pairs were created for a total of 24 nonsense words (See Table 2.1). The vocabulary words were created to elicit the most common substitutions noted in AAVE which are (a) substituting /θ/ and /ð/ with /t/ and /d/ in prevocalic positions (e.g. ðæt → dæt) and /f/, /t/, and /v/ in postvocalic positions (e.g. wɪθ → wɪf), (b) consonant cluster reduction (e.g. profesə → pofesə), and (c) postvocalic consonant reduction or deletion of consonant singles following vowels (e.g. wəld → wəl). Each of the minimal pairs have one feature per word that is likely to change from SAE production to AAVE production. These word pairs also maintain consistent syllable shape, which is the structure of a word in regards to how vowels and consonants are combined, unless the dialect sensitive feature being tested involves reduction of clusters, or final consonant deletion. There were four minimal pairs (eight words) devoted to each of these three common features.

Table 2.1

*Nonsense Words, IPA notation, Word structure and Feature of AAVE*

Word	IPA	Structure	Minimal Pair	IPA	Structure	Feature*
Thoon	θun	CVC	Foon	fun	CVC	STH
Pathin	pæθɪn	CVCV	Pafin	pæfɪn	CVCVC	STH
Maither	meɪðə	CVCV	Maiver	meɪvə	CVCV	STH
Rith	rɪð	CVC	Riv	rɪv	CVC	STH
Zirdz	zədz	CVCCC	Zirz	zəz	CVCC	CCR
Berld	bəld	CVCC	Berl	bəl	CVC	CCR
Shrum	ʃrəm	CCVC	Shum	ʃʊm	CVC	CCR
Backsten	bækstɪn	CVCCVC	Backsen	bæksɪn	CVCCVC	CCR
Noith	nɔɪθ	CVC	Noi	nɔɪ	CV	PCR
Preenas	Prɪnas	CCVCVC	Preena	Prɪna	CCVCV	PCR
Grat	græt	CCVC	Gra	græ	CCV	PCR

Etaf	ɛtɔf	VCVC	Eta	ɛtɔ	VCV	PCR
------	------	------	-----	-----	-----	-----

\* STH refers to Substitution of 'th', CCR refers to consonant cluster reduction, and PCR refers to postvocalic consonant reduction.

Testing 24 words allowed for 4 exemplar pairs of each AAVE feature tested. Twenty-four words is a reasonable amount of words to teach across sessions as a study performed by Kelly and Armstrong (2006) taught twelve aphasic individuals twenty nonsense words in four days. A study completed by Steele and Watkins (2009) taught children between 9-11 years old twenty vocabulary words over two sessions, and assessed their acquisition of these words during a third session. This study taught 8 words per day over three days. A field test was performed to assess the possibility of a child learning 8 nonsense words in 1 session, and a child volunteer, age 10, was able to learn 2 minimal word pairs in 20 minutes, and stated she believed it possible for children younger than her to learn 8 words, though it would be challenging.

All 24 of the vocabulary words were treated as nouns, due to their simple, concrete nature (McDonough, Song, Hirsh-Pasek, Golinkoff & Lannon 2011). These nouns were depicted on an 8x11 sheet of paper, using a black line drawing consisting of lines and shapes and including the assigned word's orthographic representation typed in black ink using Times New Romans, 14-font. All line drawings are included in Appendix A. Line drawings were not be similar to real life objects. Line drawings were selected for this study due to their ability to aid as visual support for expressing words (Griffith, J., Dietz, A, Weissling, K., 2014). Sheets containing these line drawings were located within a binder and protected by a laminated exterior. Nonsense words were chosen for the present study in order to control for possibilities that the participants might already know a word's definition, and in order to have full control over Standard American English (SAE) and African American Vernacular English (AAVE) transitions between words.

**Instruction.**

Instruction on the 12 minimal pairs proceeded in the same fashion. A complete script is presented in Appendix B. The investigator presented the participant with an 8 x 11 sheet of paper in a laminated sheet protector contained within a binder. These sheets of paper contained a black line drawing and the accompanying nonsense word printed directly below the line drawing. The primary investigator pointed to and pronounced the word. After the initial production, the participant was asked to repeat the word correctly. If the participant was unsuccessfully imitated the production, the investigator aided the participant's production by asking the participant to repeat the word one phoneme at a time. Then, the investigator and participant blended the phonemes together to create the word. Once the participant had successfully repeated the word, the clinician provided the participant with a definition. The participant was asked to immediately repeat the definition. If the definition was repeated incorrectly, the clinician corrected the participant, and asked for the definition again until the participant responded correctly. Then, the minimal pair for the word was introduced. The word's phonemic properties and definition were taught in the same format. After the pair of words and their definitions were taught, the words and definitions were repeated again by the investigator. Following this repetition, the participant was shown a sheet of paper without the nonsense word's typed orthography and asked to name and define the line drawing. If the participant did not respond correctly, they were reinstructed on both words, and asked to try again. After a correct response, the PI moved on to the next minimal pair.

To verify that the participant was learning the vocabulary, learning checks occurred throughout instruction, with a review of all the words learned at the end of each session. These learning checks occurred in a cumulative fashion, where after one pair is taught, the previous pair(s) and current pair were reviewed. This caused some discrepancy as word pairs that were



taught first were reviewed four times, and the final pair of words was only reviewed once. This was taken into account during data collection. The learning checks focused on differentiation between the definitions of the minimal pair words, and included showing the participant a sheet without the orthography, where the participant identified the nonsense word, and giving the participant a card without the typed word and asking them for the definitions. In order to move on to learning a new pair, the participant had to reach 100% accuracy on tasks assessing knowledge of previously learned pairs. All 12 nonsense pairs (i.e. 24 words) were taught to each participant in the previously described fashion.

## **Measures**

This study aimed to explore a participant's ability to maintain phonological differences between minimal pair words when dialect may interfere with their ability to do so.

Three measures were used to assess receptive and expressive knowledge of the words.

### **Definition task (Expressive/ Receptive).**

The Definition Task measured a participant's knowledge of the semantic features of the word in addition to their expressive capabilities for a given definition. The format of the Definition Task imitated that of the PPVT-4. The participant identified the definition given by the investigator from a field of four choices. Each quadrant of the stimuli page had a corresponding line drawing. The four choices included the correct response, the minimal pair to the correct response, a line drawing that was not taught to the participant, and a line drawing from another taught word. The participant was given a definition, and was asked to point to the correct picture. Then, the participant was asked to name the line drawing they have pointed to. Physical responses, (i.e. pointing to a line drawing) was scored as correct or incorrect for a total score of 8 for session 1, 16 for session 2 and 24 for sessions 3 and 4. These responses were used

to assess receptive abilities in regards to the nonsense words. Verbal responses (i.e. saying the name of the line drawing) were scored as correct or incorrect for a total score of 8 for session 1, 16 for session 2, and 24 for sessions 3 and 4. These responses were used to assess the participant's expressive abilities. Errors were coded as "AAVE minimal pair", "Other AAVE response" or "Other error". Errors resulting from AAVE, where the word is misidentified as its minimal pair, were likely be due to error when attempting to access phonetic properties when dialectal influence is introduced. The second is reserved for identifying a word incorrectly due to another influence of AAVE that was not being targeted in creation of the minimal pair, or if the participant is unable to remember the correct taught word. The third is reserved for errors that do not appear to be influenced by dialect, or if the child states a word that was not taught by error. This option exists in order to verify that words are not being missed solely due to a lack of learning.

### **Structured production task (Expressive).**

The Structured Production task aimed to assess the participant's ability to not only access the phonological properties of a word, but express them when given semantic properties of the word. For this task, the participant was asked to name and point to the line drawing from a minimal pair which answers a function of use question. For example, "Nikki needs to write a letter. What should she use?". This question form gave an example of use, allowing the participant to infer the proper vocabulary word without explicitly stating the definition. The participant was then presented with one minimal pair of line drawings located on an 8x11 sheet of white paper housed in a binder. The presentation of these line drawings of one minimal pair allowed the investigator to directly measure any influence AAVE may have on the production of a word. By limiting the number of choices to two, the minimal pair, errors due to short term

memory were controlled. Physical responses, (i.e. pointing to a line drawing) were scored as correct or incorrect for a total score of 8 for session 1, 16 for session 2, and 24 for sessions 3 and 4. These responses were used to assess receptive abilities in regards to the nonsense words. Verbal responses (i.e. saying the name of the line drawing) were scored as correct or incorrect for a total score of 8 for session 1, 16 for session 2, and 24 for sessions 3 and 4. These responses were used to assess the participant's expressive abilities. Errors were coded as "AAVE minimal pair", "Other AAVE response" or "Other error". The reasoning behind this scoring procedure is elaborated on in the previous paragraph.

### **Identification task (Receptive).**

The Identification Task aimed to assess the participant's ability to remember which line drawing goes with a verbally given nonsense word. This task verified that previous tasks are truly measuring errors due to word learning and dialect versus a simple inability to remember the words. This task followed the same format as the Definition Task, except that the investigator presented the participant with a taught nonsense word verbally. Then the participant was asked to point to the line drawing that represents the given nonsense word. Responses were scored as correct or incorrect for a total score of 8 points for session 1, 16 points for session 2, and 24 points for sessions 3 and 4. Errors were coded as "AAVE minimal pair", "Other AAVE response" or "Other error".

### **Procedure**

This study was completed in three phases. The first was devoted to qualifying individuals. Phase 2 involved instruction and assessment of 4 minimal pairs of words a day for three consecutive days for a total of 24 words taught. Phase 3 was reserved to test the participant for vocabulary acquisition of all 24 words.

### **Qualifying.**

In order to verify the participant is functioning at grade level, each participant completed a hearing screening, the GFTA-2, the DELV Screener, and the PPVT-4, as mentioned previously. Pretesting is not necessary for this study, due to the fact that nonsense words were used. Because nonsense words were created by the investigator, it is assumed that the participants involved in the study had no prior knowledge of these words..

### **Experimental Task.**

The pairs of minimal words were taught in sets of four with one new set taught each day for three consecutive days. The first session devoted to teaching words was approximately 30 minutes, the second session lasted about 40 minutes, and the third about 50 minutes. This discrepancy in time is to allow for an assessment of all the words taught in previous sessions.

### **Posttest.**

Each participant was required to complete all three measurement tasks mentioned previously at the end of each session for all words learned at that point. Scoring was completed by the investigator at the time of instruction, and by an independent party after the completion of these assessments via video recording.

### **Treatment Fidelity and Reliability.**

All sessions were video recorded to verify instructional procedures were followed and measures were scored accurately. A graduate student majoring in Communication Sciences and Disorders scored all instructional sessions using a checklist for each child (See Appendix C). The graduate student also coded 33% of the tests administered. Twenty five percent of the teaching sessions and assessments were randomly selected in order to train the research assistant (RA). The RA and primary investigator watched a recorded session, and scored the video

together. A consensus log was maintained to promote inter-rater reliability. After completion of collaborative scoring, the investigator and RA independently scored videos until 100% agreement was reached. After which the RA independently scored the instructional sessions and testing.

## **CHAPTER THREE: RESULTS**

### **Scoring Reliability**

Scoring of performance on the three assessment tasks was carried out by Kelly Power, a second year graduate student of Communication Sciences and Disorders at the University of Kentucky. The scoring of the Structured Production Task and the Definition Task, involved an element of subjective judgment. To check the reliability of the scoring, Mrs. Power independently scored 25% of the data from each of these assessments. Overall, the primary investigator and Mrs. Power were in complete agreement on 94.3% of verbal responses. This includes discrepancies over untaught words. When categorizing the words into “correct”, “minimal pair”, “other taught word”, and “untaught word”, agreement was 98.9%. Mrs. Power also independently scored 25% of the data by watching the videos taken during the Identification Task during each session, to verify the PI interpreted the child’s physical responses accurately. This was found to be 100% in agreement with the PI’s findings.

### **Participant A-1**

Participant A-1 was a 7.0 year old African American female in the first grade. She was recruited through the extended day program staffed by Parks and Recreation at William Wells Brown Elementary School. Scores on the four qualifying measures are presented in Table 3.1. Her score on the PPVT-4 placed her in the high average range in receptive knowledge of single

Table 3.1

*Participants' performance on qualifying measures*

Participant	Hearing Screening	DELV Language Variation	DELV Disorder Risk	PPVT-4 Standard Score*	GFTA-2 Standard Score**	AAVE use noted on GFTA-2
A-1	Passed	SAE speaker	Lowest risk	105	103	(ð >d) (θ >f)
A-2	Passed	SAE speaker	Lowest risk	104	104	--
A-3	Passed	SAE speaker	Lowest risk	117	105	--
A-4	Passed	SAE speaker	Lowest risk	92	108	--

words, and her score on the GFTA-2 put her in the 50<sup>th</sup> percentile of correctly producing phonemes in different positions of words based on her age. During the administration of the GFTA-2, two instances of AAVE replacements were noted, and are mentioned in Table 3.1 (i.e. *fɛdə* for *fɛðə*, and *bæftəb* for *bæθtəb*), but these phonological changes were not noted during the completion of the DELV, which was meant to measure variance from SAE. She scored as a Mainstream American English speaker with the lowest risk for a language disorder on the DELV. Due to illness, the teaching schedule of three consecutive daily teaching sessions immediately followed by a posttest session was revised to one teaching session, a break for illness, two more days of teaching, a weekend break, and the final post test. Standard deviation for these qualifying measures are presented in the methods section of this document.

### **Learning Checks.**

The learning checks were conducted throughout each session to verify words were being accurately learned. Discrete data regarding the three learning checks completed during sessions 1, 2 and 3 are presented in table 3.2. This data indicates the number of corrections necessary for

her to achieve the set criteria of 100% accuracy before proceeding to the next minimal pair of words.

Table 3.2

*Participant A-1's performance on learning checks across sessions*

Learning Check	Session 1		Session 2		Session 3	
	Receptive	Expressive	Receptive	Expressive	Receptive	Expressive
1	0	1	2	3	0	1
2	1	3	4	6	3	10
3	1	5	2	13	5	19

Throughout sessions and learning checks, the participant required more corrections for expressive tasks than receptive tasks.

**Definition Task (Receptive/Expressive).**

The definition task required the participant to point to the line drawing from a field of four choices when given a definition, and then provide the label for his or her selection. Table 3.3 presents A1's performance on words taught by session. The column headed *session words* always had an n of 8 words for Sessions 1, 2, and 3, which were teaching sessions. The column headed *retention of taught words* captured memory of previously taught words; therefore, the number of words taught increased by eight from Session 1 to 2, from Session 2 to 3, and from session 3 to 4. The column heading *total word learning* is the cumulative number of words learned from session to session (session + retention).

Table 3.3

*Participant A-1's performance on the definition task across sessions*

Session Words	Receptive Retention of Taught Words	Total Word Learning	Session Words	Expressive Retention of Taught Words	Total Word Learning

Session 1	100%	n/a	100%	25%	n/a	25%
Session 2	100%	100%	100%	25%	0%	12.5%
Session 3	75%	93.7%	87.5%	25%	0%	8.3%
Session 4	n/a	87.5%	87.5%	n/a	4.2%	4.2%

First, results for the participant's performance on the receptive portion of the task will be discussed, followed by a discussion of her performance on the expressive portion. A-1 was able to identify the correct line drawing given the definition for all words taught during session 1 and session 2 (100%) but not during session 3 ( $n = 7$ ). Similar results are noted for retention of words learned as indicated by a decline from 100% retention (Session 2,  $n = 8$ ) to 93.7% retention at Session 3 ( $n = 14$ ), and an 87.5% retention rate at Session 4 ( $n = 24$ ). Retention of all taught words (Session 4) indicates 3 out of the 24 words taught were not remembered. As presented in Table 3.4, more errors were attributable to the selection of another taught word than to the selection of the minimal pair word

Table 3.4

*Participant A-1's errors on the definition task by type and modality across sessions*

Error Type	AAVE Minimal Pair	Receptive Another Taught Word	Foil Drawing	AAVE Minimal Pair	Expressive Another Taught Word	Untaught Word
Session 1	0	0	0	2/8	4/8	0
Session 2	0	0	0	0	3/16	11/16
Session 3	1/24	2/24	0	1/24	5/24	16/24
Session 4	1/24	2/24	0	2/24	16/24	5/24
Percent of Errors Made	33%	67%	0%	7.7%	43.1%	49.2%

On the expressive portion of the Definition Task, Participant A-1 provided the correct label for 2 out of 8 words taught during sessions 1-3, as presented in Table 3.3. No previously taught words were correctly identified at Sessions 2 and 3, while 1 word was correctly identified



during Session 4. As shown in Table 3.4, providing another taught word, or providing a label for an untaught word accounted for the majority of errors. During sessions two and three, the participant repeated a similar untaught word each time she was requested to label during the assessment portion. (i.e. PI: “Point to something you wash your hair with... what do you call it?” A-1: “python.” PI: “Okay, now point to something you write with... what do you call it?” A-1: “python.”, etcetera). This resulted in a high number of “other” expressive answers during Session 2 ( $n = 11$ ), and Session 3 ( $n = 16$ ). The minimal pair for the word tested was rarely provided.

**Structured Production Task (Receptive/ Expressive).**

This task provided the participant with a sentence scenario, and then asked them to answer a question by pointing to and labeling one of the taught nonsense words. Data on Participant A-1’s performance is presented in Table 3.5. First, the receptive portion of the task will be discussed, followed by the expressive portion.

Table 3.5

*Participant A-1’s performance on the structured production task across sessions*

	Session Words	Receptive Retention of Taught Words	Total Word Learning	Session Words	Expressive Retention of Taught Words	Total Word Learning
Session 1	100%	n/a	100%	50%	n/a	50%
Session 2	100%	100%	100%	0%	0%	0%
Session 3	87.5%	100%	95.8%	25%	0%	8.3%
Session 4	n/a	100%	100%	n/a	8.3%	8.3%

Participant A-1 receptively identified the correct line drawing with 100% accuracy during Session 1, 2 and 4. During Session 3, she misidentified one word as its minimal pair. However, her verbal responses were less consistent, ranging from 0% to 50% ( $n = 4$ ) accuracy for session words, and 0% to 8% ( $n = 2$ ) for previously taught words.

Table 3.6

*Participant A-1's errors on the structured production task by type and modality across sessions*

Error Type	Receptive		Expressive	Untaught Word
	AAVE Minimal Pair	AAVE Minimal Pair	Another Taught Word	
Session 1	0	1/8	3/8	0
Session 2	0	0	1/16	15/16
Session 3	1/24	1/24	11/24	10/24
Session 4	0	0	18/24	4/24
Percent of Errors Made	100%	3.1%	51.6%	45.3%

Errors out of possible trials by type and by modality for the Structured Production Task are presented in Table 3.6. As previously mentioned, only one receptive error was noted across all 4 sessions. Expressively, errors were predominately accounted for by providing the label for another taught word ( $n = 33$ ) or an untaught word ( $n = 29$ ). Percentages located in the bottom of table FFF refer to the percentage of error type of all errors made on that particular task (e.g. AAVE minimal pair errors accounted for 3.1% of total errors)

**Identification Task (Receptive).**

The Identification Task required the participant to point to the correct line drawing when given the nonsense word by the PI. Discrete data on participant A-1's performance during the identification task across sessions is located in Table 3.7.

Table 3.7

*Participant A-1's performance on the identification task across sessions*

	Session Words	Receptive	Total Word Learning
		Retention of Taught Words	
Session 1	75%	n/a	75%
Session 2	25%	62.5%	43.8%
Session 3	37.5%	37.5%	37.5%
Session 4	n/a	20.8%	20.8%

Participant A-1's correct answers gradually decreased regardless of words tested from 75% to 20.8% correct for total words assessed. When she did not correctly identify the given word, she was more likely to identify that word as another taught word than she was to select the word's minimal pair. Errors by trial and type are presented in Table 3.8.

Table 3.8

*Participant A-1's errors on the identification task by type across sessions*

Error Type	AAVE Minimal Pair	Receptive	
		Other Taught Word	Foil Drawing
Session 1	1/8	1/8	0
Session 2	4/16	5/16	0
Session 3	3/24	12/24	0
Session 4	9/24	9/24	1/24
Percent of Errors Made	36.4%	61.4%	2.2%

### **Participant A-2**

Participant A-2 was a 7.5 year old African American female in the second grade. She was recruited through the extended day program staffed by Parks and Recreation at William Wells Brown Elementary School. Scores on the four qualifying measures are presented in Table 3.1. Her score on the PPVT-4 placed her in the high average range for receptive knowledge of single words, and her score on the GFTA-2 put her in the 47<sup>th</sup> percentile for correct production of phonemes. During the administration of the GFTA-2, no instances of AAVE replacements were noted. She scored as a Mainstream American English speaker with the lowest risk for a language disorder on the DELV.

### **Learning checks.**

As previously stated, learning checks were conducted throughout each session to verify words were being accurately learned. Discrete data for Participant A-2 regarding the three learning checks completed during all sessions are presented in table 3.9.

Table 3.9

*Participant A-2's performance on learning checks across sessions*

Learning Check	Session 1		Session 2		Session 3	
	Receptive	Expressive	Receptive	Expressive	Receptive	Expressive
1	1	3	1	3	1	1
2	1	4	8	11	3	7
3	1	8	4	16	5	13

This table is formatted as Participant A-1's, where the number listed indicated the number of corrections required for the participant to gain 100% accuracy, as was required before moving on to learning the next minimal pair of words. As expected, throughout learning checks, the participant required more corrections for expressive tasks than receptive tasks.

**Definition Task (Receptive/ Expressive).**

Data about Participant A-2's performance on the definition task across sessions is presented in table 3.10. First her receptive results will be discussed, followed by her results on the expressive portion of the task. As with Participant A-1, the table presents A-2's words taught by session.

Table 3.10

*Participant A-2's performance on the definition task across sessions*

	Receptive			Expressive		
	Session Words	Retention of Taught Words	Total Word Learning	Session Words	Retention of Taught Words	Total Word Learning
Session 1	100%	n/a	100%	62.5%	n/a	62.5%
Session 2	75%	100%	87.5%	12.5%	0%	6.3%

Session 3	100%	81.3%	87.5%	25%	0%	6.3%
Session 4	n/a	70.8%	70.8%	n/a	0%	0%

During the receptive portion, she showed a steady decline in correct answers in total word learning, from 100% correct ( $n= 8$ ) to 71% correct ( $n = 17$ ). Retention of previously taught words also declined during each session, where she correctly identified 100% of previously taught words in Session 2 ( $n= 8$ ), 81% in Session 3 ( $n = 13$ ) and 71% during Session 4 ( $n = 17$ ). She missed a total of 7 words across these sessions, where one word was misidentified two times. As presented in Table 3.11, Participant A-1’s most common receptive error type was to select the AAVE minimal pair, which she did on 10 of 72 given opportunities.

Table 3.11

*Participant A-2’s errors on the definition task by type and by modality across sessions*

Error Type	Receptive			Expressive		Untaught Word
	AAVE Minimal Pair	Other Taught Word	Foil Drawing	AAVE Minimal Pair	Other Taught Word	
Session 1	0	0	0	0	2/8	1/8
Session 2	2/16	0	0	1/16	11/16	3/16
Session 3	1/24	2/24	0	1/24	16/24	5/24
Session 4	7/24	0	0	0	0	24/24
Percent of Errors Made	83.3%	16.7%	0%	3.1%	45.3%	51.6%

During the expressive portion of the definition task, participant A-2 showed inconsistent performance on total word learning between 62.3% correct ( $n= 5$ , Session 1) correct and 0% correct ( $n = 0$ , Session 4) Additionally, participant A-2 showed no retention of taught words from the previous session. During Session 4, the participant gave an untaught word for every answer, (much like Participant A-1 during Sessions 2 and 3) resulting in over 50% of errors

attributed to the *untaught word* category. She was more likely to label the given definition as another taught word or an untaught word than she was to use its minimal pair.

**Structured Production Task (Receptive/ Expressive).**

Data on Participant A-2’s performance is presented in Table 3.12. Participant A-2 performed inconsistently during both the receptive and expressive tasks. On the receptive portion, she scored between 100% correct (Session 1,  $n = 8$ ) and 79% correct (Session 4,  $n = 19$ ) on total word learning. Retention of taught words maintained at 100% from session 2 to session 3, and then dropped to 79% in session 4.

Table 3.12

*Participant A-2’s performance on the structured production task across sessions*

	Receptive		Total Word Learning	Expressive		Total Word Learning
	Session Words	Retention of Taught Words		Session Words	Retention of Taught Words	
Session 1	100%	n/a	100%	25%	n/a	25%
Session 2	88%	100%	94%	0%	0%	0%
Session 3	88%	100%	96%	13%	0%	4%
Session 4	n/a	79%	79%	n/a	0%	0%

However, expressively, no retention of words from session to session was noted. On the expressive portion, she scored between 25% correct (Session 1,  $n = 2$ ) and 0% correct (Session 2, and Session 4) on total word learning. Errors out of possible trials by type and by modality for the Structured Production Task are presented in Table 3.13.

Table 3.13

*Participant A-2’s errors on the structured production task by type and modality across sessions*

Error Type	Receptive AAVE Minimal Pair	Expressive AAVE Minimal Pair	Other Taught Word	Untaught Word
Session 1	0	1/8	2/8	3/8

Session 2	1/16	2/16	14/16	0
Session 3	1/24	0	5/24	18/24
Session 4	5/24	0	0	24/24
Percent of Errors Made	100%	4.3%	30.4%	65.3%

### Identification Task (Receptive).

Discrete data on participant A-1's performance during the Identification Task across sessions is presented in table 3.14. Participant A-2's correct answers in total word learning ranged from 100% correct (Session 1,  $n=8$ ), and 31.3% correct (Session 2,  $n=5$ ). Her correct answers actually increased from session 2 through session 4, with total word learning at 41.7% correct during Session 3 ( $n=10$ ), and 54.2% correct during Session 4 ( $n=13$ ).

Table 3.14

*Participant A-2's performance on the receptive task across sessions*

	Session Words	Receptive Retention of Taught Words	Total Word Learning
Session 1	100%	n/a	100%
Session 2	25%	37.5%	31.3%
Session 3	37.5%	50%	41.7%
Session 4	n/a	54.2%	54.2%

Unlike Participant A-1, when A-2 did not correctly identify the given word, she was most likely to identify the word's minimal pair, followed by another taught word. She selected an untaught line drawing once during session 3, and once during session 4, though these errors did not occur during the same given word.

Table 3.15

*Participant A-2's errors on the identification task by type and modality across sessions*

Error Type	AAVE Minimal Pair	Receptive Other Taught Word	Foil Drawing
------------	-------------------	-----------------------------	--------------

Session 1	0	0	0
Session 2	8/16	3/16	0
Session 3	7/24	6/24	1/24
Session 4	6/24	4/24	1/24
Percent of Errors Made	58.3%	36.1%	5.6%

### Participant A-3

Participant A-3 was a 7.6 year old African American female in the second grade. She was recruited through an Upward Sports basketball practice the PI was invited to attend. Scores on the four qualifying measures are presented in Table 3.1. Her score on the PPVT-4 placed her in the moderately high score range for receptive knowledge of single words, and her score on the GFTA-2 put her in the >56<sup>th</sup> percentile for proper production of phonemes in different positions of words based on her age. During the administration of the GFTA-2, no instances of AAVE replacements were noted. She scored as a Mainstream American English speaker with the lowest risk for a language disorder on the DELV.

#### Learning checks.

Discrete data for Participant A-3 regarding the learning checks completed during all teaching sessions are presented in table 3.16. Throughout sessions and learning checks, the participant required more corrections for expressive tasks than receptive tasks. During each of the learning checks during all three sessions, she eventually reached 100% accuracy as was required for her to move on to the next section of the word learning or assessment portion.

Table 3.16

*Participant A-3's performance on learning checks across sessions*

Learning Check	Session 1		Session 2		Session 3	
	Receptive	Expressive	Receptive	Expressive	Receptive	Expressive
1	0	1	0	3	0	2



2	0	1	1	3	0	1
3	0	9	0	4	0	22

**Definition Task (Receptive/ Expressive).**

Data about Participant A-3’s performance on the all tasks across sessions is presented in table 3.17. First, the results from the receptive portion of the task will be reported, followed by the expressive portion. Across the receptive portion of this task, Participant A-3 selected the correct answer with 100% accuracy. During the expressive portion of the definition task, participant A-3 performed inconsistently on total word learning between 12.5% correct (Session 2,  $n = 2$ ) and 75% correct (Session 1,  $n = 8$ ). Retention of taught words increased from Session 1 ( $n = 0$ ) to Session 2 ( $n = 1$ ) to Session 3 ( $n = 5$ ). During Session 3 and Session 4, the participant scored 20.8% correct ( $n = 5$ ) on total word learning. She identified 9 words correctly between the sessions, with only one word correctly identified across both sessions.

Table 3.17

*Participant A-3’s performance on the definition task across sessions*

	Session Words	Receptive Retention of Taught Words	Total Word Learning	Session Words	Expressive Retention of Taught Words	Total Word Learning
Session 1	100%	n/a	100%	75%	n/a	75%
Session 2	100%	100%	100%	25%	0%	12.5%
Session 3	100%	100%	100%	50%	6.3%	20.8%
Session 4	n/a	100%	100%	n/a	20.8%	20.8%

Error type by trial and modality are located in table 3.18. During sessions 3 and 4, the participant verbally identified words as their real world definition (e.g. PI: “Point to something you build things with... What do you call it? A-3: “Blocks.” PI: Point to something you sleep on... What do you call it?” A-3“pillow”.) This resulted in a high number of “untaught word”

expressive answers during these sessions. Across participants, no consistent correlation between use of minimal pair words in place of their correct counterpart were found.

Table 3.18

*Participant A-3's errors on the definition task by type and modality across sessions*

Error Type	AAVE Minimal Pair	Receptive Other Taught Word	Foil Drawing	AAVE Minimal Pair	Expressive Other Taught Word	Untaught Word
Session 1	0	0	0	0	2/8	0
Session 2	0	0	0	0	11/16	2/16
Session 3	0	0	0	0	0	19/24
Session 4	0	0	0	2/24	6/24	11/24
Percent of Errors Made	0%	0%	0%	3.8%	35.8%	60.4%

**Structured Production Task (Receptive/ Expressive).**

Data on Participant A-3's performance is presented in Table 3.19. Once again, Participant A-3 answered the receptive portion of this task with 100% accuracy. Expressively, while her knowledge of the session words decreased over time (Session 1 ( $n = 6$ ), Session 2 ( $n = 3$ ), Session 3 ( $n = 1$ )), her ability to remember previously taught words increased from Session 2 ( $n = 0$ ) to Session 3 ( $n = 1$ ) to Session 4 ( $n = 3$ ).

Table 3.19

*Participant A-3's performance on the structured production task across sessions*

	Session Words	Receptive Retention of Taught Words	Total Word Learning	Session Words	Expressive Retention of Taught Words	Total Word Learning
Session 1	100%	n/a	100%	75%	n/a	75%
Session 2	100%	100%	100%	37.5%	0%	18.8%
Session 3	100%	100%	100%	12.5%	6.3%	8.3%
Session 4	n/a	100%	100%	n/a	12.5%	12.5%

Errors out of possible trials by type and by modality for the Structured Production Task are presented in Table 3.20. Much like on the Definition Task, Participant A-3 often labeled with real-world words, which resulted in a high number of errors attributed to the “untaught word” category. Though this behavior occurred in Sessions 2, 3 and 4, she labeled pictures as their real-world name most often during sessions 3 and 4.

Table 3.20

*Participant A-3’s errors on the structured production task by type and modality across sessions*

Error Type	Receptive		Expressive	
	AAVE Minimal Pair	AAVE Minimal Pair	Another Taught Word	Untaught Word
Session 1	0	1/8	1/8	0
Session 2	0	1/16	5/16	7/16
Session 3	0	0	0	22/24
Session 4	0	1/24	6/24	14/24
Total Error Percent	0%	5.2%	20.7%	74.1%

**Identification Task (Receptive).**

Discrete data on participant A-3’s performance during the identification task across sessions is presented in table 3.21.

Table 3.21

*Participant A-3’s performance on the identification task across sessions*

	Session Words	Receptive	Total Word Learning
		Retention of Taught Words	
Session 1	50%	n/a	50%
Session 2	37.5%	50%	43.8%
Session 3	75%	50%	58.3%
Session 4	n/a	79.2%	79.2%

Participant A-3 performed inconsistently on total word learning from 79.2% correct (Session 4,  $n = 19$ ) and 43.8% correct (Session 2,  $n = 7$ ). Participant A-3 never selected an untaught line drawing during this task. Similarly to Participant A-2, Participant A-3 was most likely to select the minimal pair for the word when she did select a line drawing in error.

Table 3.22

*Participant A-3's errors on the identification task by type and modality across sessions*

Error Type	AAVE Minimal Pair	Receptive	
		Other Taught Word	Foil Drawing
Session 1	3/8	1/8	0
Session 2	8/16	1/16	0
Session 3	4/24	6/24	0
Session 4	3/24	2/24	0
Total Error Percent	64.3%	35.7%	0%

### **Participant B-1**

Participant B-1 was a 7.5 year old African American male in the second grade. His mother contacted the primary investigator after seeing a flyer posted in the University of Kentucky Clinic. Scores on the four qualifying measures are presented in Table XXX. His score on the PPVT-4 placed him in low average range of receptive knowledge of single words, and his score on the GFTA-2 put him in the >55<sup>th</sup> percentile for correct production of phonemes. During the administration of the GFTA-2, no instances of AAVE replacements were noted. He scored as having some Variation from Mainstream American English with the lowest risk for a language disorder on the DELV. Participant B-1 had a modified schedule due to inclement weather. He participated in the first three teaching sessions consecutively, but the final assessment of word learning did not occur until five days after completion of word teaching.

### **Learning Checks.**

Table 3.23

*Participant B-1's performance on learning checks across sessions*

Learning Check	Session 1		Session 2		Session 3	
	Receptive	Expressive	Receptive	Expressive	Receptive	Expressive
1	0	1	1	0	2	1
2	0	2	1	12	1	5
3	0	10	0	8	2	9

Learning checks were conducted throughout each session to verify words were being accurately learned. Discrete data regarding the three learning checks completed during sessions 1, 2 and 3 are presented in table 3.23. Participant B-1 is the only participant with an instance where he required more corrections on the receptive learning check than the expressive learning check. The number listed indicated the number of corrections required for the participant to gain 100% accuracy, as was required before moving on to learning the next minimal pair of words.

**Definition Task (Receptive/ Expressive).**

Data about Participant B-1's performance on the all tasks across sessions is presented in table 3.24. First, his performance on the receptive portion of the task will be discussed, followed by his performance on the expressive portion. Participant B-1 was able to point to the correct line drawing with 100% accuracy during Session 1. His performance on "Total Word Learning" declined on Session 2 ( $n = 13$ ), and increased for Session 3 ( $n = 22$ ), where it was maintained during Session 4.

Table 3.24

*Participant B-1's performance on the definition task across sessions*

	Session Words	Receptive Retention of Taught Words	Total Word Learning	Session Words	Expressive Retention of Taught Words	Total Word Learning
Session 1	100%	n/a	100%	62.5%	n/a	62.5%
Session 2	75%	87.5%	81.3%	62.5%	12.5%	37.5%

Session 3	100%	87.5%	91.7%	12.5%	18.8%	16.7%
Session 4	n/a	91.7%	91.7%	n/a	29.2%	29.2%

Although two words were incorrectly identified in 2 these two sessions, there was not one word that was misidentified across all three sessions. Additionally, when these words were misidentified, only one word was misidentified by its minimal pair both times. On retention of words, B-1 performed consistently from Session 2 ( $n = 7$ ) to Session 3 ( $n = 14$ ) before increasing his retention during Session 4. During the expressive portion of the definition task, participant B-1 performed inconsistently between 62.5% correct (Session 1,  $n = 5$ ) and 16.7% correct (Session 3,  $n = 4$ ).

Table 3.25

*Participant B-1's errors on the definition task by type and modality across sessions*

Error Type	Receptive			Expressive		Untaught Word
	AAVE Minimal Pair	Other Taught Word	Foil Drawing	AAVE Minimal Pair	Other Taught Word	
Session 1	0	0	0	1/8	2/8	0
Session 2	2/16	1/16	0	0	9/16	1/16
Session 3	2/24	0	0	1/24	18/24	1/24
Session 4	0	1/24	1/24	2/24	12/24	3/24
Total Error Percent	57.1%	28.6%	14.3%	8%	82%	10%

Errors out of possible trials by type and modality are presented in table 3.25. When Participant B-1 made an expressive error, he was most likely to select the line drawing for the minimal pair of the correct word. Expressively, he was most likely to answer with another taught AAVE word. Participants A-1, A-2, and A-3 were all most likely to answer with an untaught word during this task.

### Structured Production Task (Receptive/ Expressive).

Data on Participant B-1's performance is presented in Table 3.26. Participant B-1 pointed to the correct line drawing with 100% accuracy during the first and final session. He misidentified one word during session 2 and one word during session 3. These words were not consistent from session to session. Participant B-1 showed a slow decline on the verbal portion of the task, from 75% correct (Session 1,  $n = 6$ ) to 29.2% correct ( $n = 7$ ).

Table 3.26

*Participant B-1's performance on the structured production task across sessions*

	Session Words	Receptive Retention of Taught Words	Total Word Learning	Session Words	Expressive Retention of Taught Words	Total Word Learning
Session 1	100%	n/a	100%	75%	n/a	75%
Session 2	100%	87.5%	93.8%	37.5%	25%	31.3%
Session 3	100%	93.8%	95.8%	37.5%	25%	29.5%
Session 4	n/a	100%	100%	n/a	29.2%	29.2%

Errors out of possible trials by type and by modality for the Structured Production Task are presented in Table 3.27. During sessions 2, 3, and 4, Participant B-1 more commonly identified words as another taught word a line than its minimal pair. Just like during the previous task, B-1 was more likely to identify a word as another taught word than he was to select an untaught word.

Table 3.27

*Participant B-1's errors on the structured production task by type and modality across sessions*

Error Type	Receptive AAVE Minimal Pair	AAVE Minimal Pair	Expressive Other Taught Word	Untaught Word
Session 1	0	1/8	1/8	0
Session 2	1/16	0	4/16	7/16
Session 3	1/24	2/24	12/24	3/24

Session 4	0	1/24	13/24	3/24
Total Error Percent	100%	8.5%	63.8%	27.7%

**Identification Task (Receptive).**

The Identification Task required the participant to point to the correct line drawing when given the nonsense word by the PI. Discrete data on participant B-1’s performance during the identification task across sessions is presented in table 3.28. Participant B-1 performed inconsistently on total word learning between 100% correct (Session 1,  $n = 8$ ) and 54.2% correct (Session 3,  $n = 13$ ).

Table 3.28

*Participant B-1’s performance on the identification task across sessions*

	Session Words	Receptive Retention of Taught Words	Total Word Learning
Session 1	100%	n/a	100%
Session 2	62.5%	87.5%	75%
Session 3	50%	56.3%	54.2%
Session 4	n/a	87.5%	75%

When he did not correctly identify the given word, he either answered with the minimal pair, or with another taught AAVE line drawing. Errors out of possible trials by type are presented in table 3.29. He selected an untaught line drawing twice during session 3, and once during session 4. Just like all other participants, B-1 was most likely to select the AAVE minimal pair drawing when making an error. However, of all the participants, B-1 selected an untaught line drawing during the receptive portion of all tasks more often than any other participant (4 times). No consistent pattern emerged from participant B-1’s responses on this task.

Table 3.29



*Participant B-1'*

---

Error Type	AAVE Minimal Pair	Receptive Other Taught Word	Foil drawing
Session 1	0	0	0
Session 2	4/16	0	0
Session 3	6/24	3/24	2/24
Session 4	6/24	2/24	1/24
Total Error Percent	69.2%	19.2%	11.6%

---

## CHAPTER FOUR: DISCUSSION AND IMPLICATIONS

The goal of the present study was to examine the effects of AAVE dialect on the encoding and decoding of the phonemic-semantic properties of nonsense words that differed in meaning and by a single phonological attribute. Three children identified as MAE speakers and one children identified as AAVE speaker were taught twelve minimal pairs of nonsense words with dialect-sensitive features over three sessions. Results revealed that across all participants on all measures, their receptive knowledge of the taught nonsense words was higher than their expressive knowledge of these words. This finding is in line with other studies on acquisition of vocabulary, and our overall understanding of how individuals learn a new word. Results will be discussed by task in order to highlight similarities and differences found among participants. Receptive performance is discussed first followed by interpretation of expressive performance.

### **The Definition Task.**

Performance on the receptive portion of this task was higher than performance on the expressive portion across all participants. During the first assessment, when the participants were required to correctly point to and name eight taught words, each participant scored 100% in the receptive category. Only one participant (A-3) was successfully able to point to the correct line drawing across all four assessments. The other participants selected either the minimal pair or another taught AAVE line drawing at some point across sessions. The only participant to select an untaught line drawing during this assessment task was Participant B-1 during session 4. Overall, there were not consistent errors made across participants of note. On the expressive portion of this task, results were far more varied between individuals. Both A-1 and A-3 identified half or more of the words as an untaught word in one or more sessions. This was thought to be because of frustration, because they were not able to accurately access the

phonemic properties of the taught nonsense word, or perhaps because they were bored of the assessments and wanted the task to be over. The discrepancy in results is not surprising as production tasks are consistently more difficult than receptive tasks (Kan & Windsor, 2009). In order to control for these mistakes should a study like this be completed again, perhaps less words should be taught per day.

### **The Structured Production Task.**

On the receptive portion of this task, all individuals were able to correctly identify the eight words taught during the first session. Participant A-1 and Participant A-3 pointed to the correct line drawing across all sessions. Participant B-1 had the longest gap between sessions (5 days between sessions 3 and 4), and his receptive knowledge in this category across time actually increased. The difference in sessions was only the identification of one word, so it is possible he guessed rather than gained knowledge. A-2, who was shown to be an MAE speaker, had the fewest correct answers across all sessions, only getting 79% correct during her fourth session. Expressively, scores varied from 0% ( $n = 0$ ) to 75% ( $n = 6$ ) on the first session between participants. This wide range of scores was observed across tasks over time.

### **The Identification Task.**

This task was put in place in order to assess acquisition of the nonsense words. Participant A-1 was the one child to show a consistent decline across sessions [from 75% correct in Session 1 ( $n = 6$ ), to 20.8% correct in Session 4, ( $n = 5$ )]. Additionally, she was the only child to select the line drawing for another taught word than a minimal pair drawing. The other participants showed inconsistent performance across sessions, but selected the minimal pair most often when they made an error. Overall, no consistent errors were seen across participants.

Across participants, dialect did not seem to have an influence on whether or not these words were properly phonologically encoded. In fact, it seemed that participants may have required extensive time, or fewer words per day taught so that they could have refined their knowledge of these words. Simply put; these children had difficulty learning so many words in a short period of time, and moreover, they did not gravitate to the minimal pair of the word when they made an error, as we hypothesized they would.

### **Limitations**

This study has limitations regarding the applicability of its findings. Mainly, the sample size was very limited. Only four individuals took part in this research study, of which there was not an even distribution between gender, MAE variance, and grade level. All three MAE speakers were female, and the only participant with some variance from MAE was a male.

Across all participants some AAVE usage was noted during informal break times between tasks. However, this AAVE usage was not noted while administering the DELV. It is possible that these participants, when introduced to a formal task, such as a standardized test, code-switched to standard American English. According to Owens (2008), code switching is a rule-governed, complex phenomenon that is influenced by the context and the situation. Furthermore, the type of discourse may impact the individual's dialect choice at that time. At this point, each participant had been in a formal education setting for 1-2 years. This likely allowed them to hone their code-switching skills, and encouraged them to code switch when completing formal tasks. This is why while in a conversational setting, some AAVE influences could be heard in their speech. In addition to the formality of the task, other possible influences on their code switching are being introduced to an unknown, Caucasian adult. This ethnic difference may have indicated to the participants that code-switching was appropriate to interact with the PI. If a

study of this nature were to be attempted again, the use of a cultural broker should be considered. Otherwise, it may be beneficial for the PI to take a language sample and assess dialect usage from that, as an informal setting may allow participants to use AAVE more often than they would given a formal, standardized test.

The decline in correct answers in both receptive and expressive modalities across participants may be an indication of the participant's short term learning of the words. If this study were explored again, it may be beneficial to teach fewer words each day, and review all taught words before assessments, instead of just reviewing words taught that day. This may allow for greater retention of the learned words.

## **Implications**

Due to the limitations of this study, it is difficult to make any blanket statements about how AAVE may impact vocabulary acquisition. While no obvious differences between participants in this study emerged, further studies should be accomplished in order to verify that a relationship between NMAE dialects and vocabulary acquisition does or does not exist. Should any differences be found, Speech-Language Pathologists and teachers need to reevaluate how they are teaching vocabulary in schools, perhaps by punching the importance of the link between phonology and semantics.

This study verified that adding a word to one's receptive vocabulary occurs more easily and quickly than adding it to expressive vocabulary. Higher performance on receptive tasks was seen consistently across all 4 participants. Additionally, knowledge of both expressive and receptive vocabulary will decrease over time without reinstruction on words. This was seen across all participants on two of three tasks. This is important for current and future speech-language pathologists, because it highlights the importance of constant reinstruction on newly

introduced vocabulary words. Especially because speech-language pathologists are often limited in how many times in one week they can see a child. Reinstruction and maintenance of vocabulary can be accomplished through “homework”, or a short review period at the beginning of each session.

APPENDIX

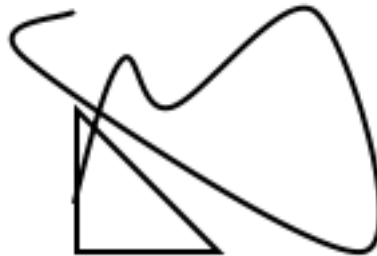
Appendix A: Line Drawings and typed orthography of nonsense words



Thoon



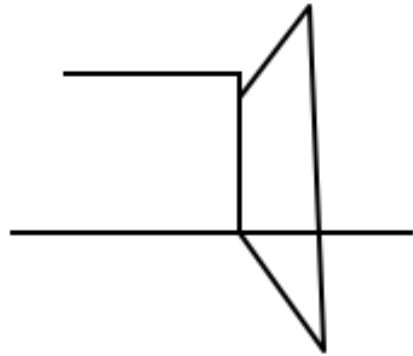
Berld



Noith



Foon



Rith



Berl



Pathin

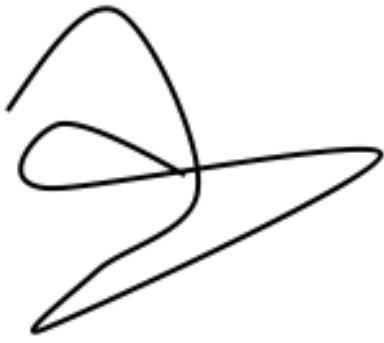


Noi

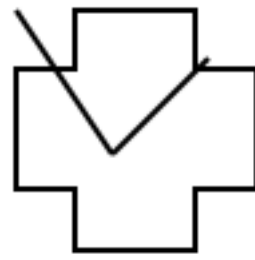


Backsten

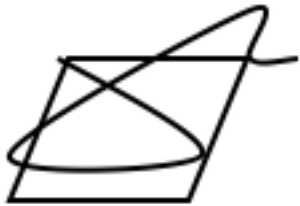




Riv



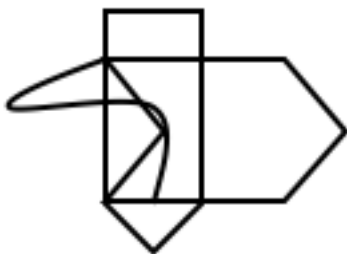
Prenas



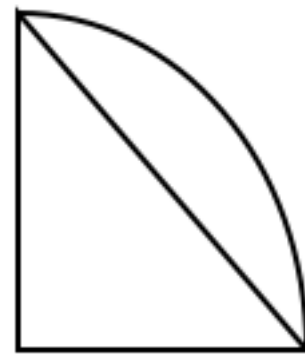
Pafin



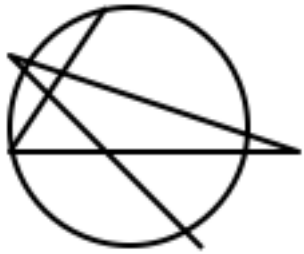
Zirdz



Backsen



Eta



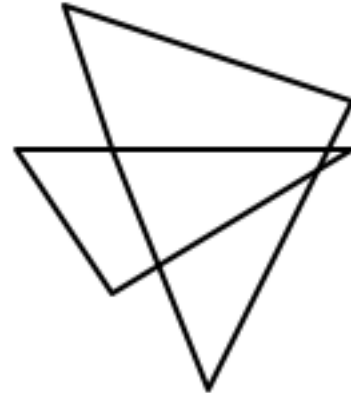
Preena



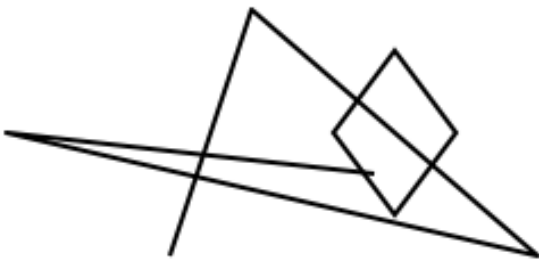
Grat



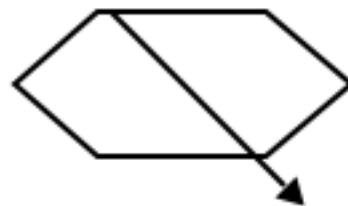
Zirz



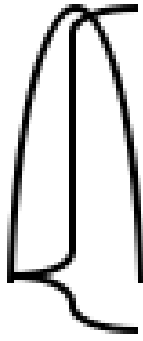
Maither



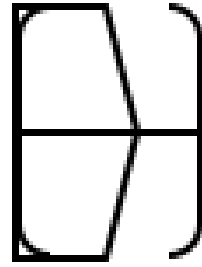
Etaf



Shrum



Gra



Shum



Maiver

## **Appendix B: Complete Script**

### Complete Script

#### Session 1

Hello, my name is Miss Heather, and I'm a student at UK. Today, I am going to teach you some silly words. These words are made up, so you have never heard them before! When I teach you these words, some of them are going to sound almost the same. I want you to try your hardest to remember that even though these words sound almost the same, they are still different, and they mean different things. Do you understand?

### **Word Pair 1: thoon and foon**

(picture of thoon)

This is a thoon.

What is this called ?

Correct Response: Very good, a Thoon.

Incorrect Response: Not quite! Remember, this is a made up word. It's a thoon. Th-oo-n. let's sound it out together. Th-oo-n. Now you try. Very good, a thoon.

What is this called?

A thoon is something you write with.

What do you do with a thoon?

Correct Response: Good job, you use a thoon to write with.

Incorrect Response: Listen closely, and I'll tell you again. Ready? A thoon is something you *write* with. What do you do with a thoon?

(Show picture of foon)

Now, be careful, because this is a foon.

What is this called?

Correct Response: Good job, a foon.

Incorrect Response: No, listen closely. This is a foon. F-oo-n. let's sound it out together. F-oo-n. Very good, foon. What is this called?

A foon is something you sleep on

What do you do with a foon?

Correct Response: You sleep on a foon, good job.

Incorrect Response: Oh, that's not what I said! Let's try again. A foon is something you *sleep on*. What do you do with a foon?

### **Review of Foon and Thoon**

Which one of these is used to write with?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you write with. That's better.

What do you call it?

Correct: Very good, a thoon is something you write with.

Incorrect: No, not quite. A **Thoon** is something you write with. So, try again, What do you call it?

Which of these is something you sleep on?

Correct: That's right! (move on to naming)

Incorrect: Oh, not quite. This is something you sleep on. Point to the one you sleep on

What do you call it?

Correct Response: You're right, a foon is something you sleep on.

Incorrect Response: Oops, A **foon** is something you sleep on. So try again, what do you call this?

(place "foon" and "thoon" to the side, begin with next minimal pair)

## **Word Pair 2: Rith and Riv**

(show picture of a rith)

This is a Rith.

What is this called?

Correct: A rith, good job.

Incorrect: Almost. This is a rith. R-i-th Let's sound it out together, R-i-th. Now you try. Very good, a rith.

A rith is something you wear on your head.

What do you do with a rith?

Correct: You wear it on your head, that's right.

Incorrect: That's not what I said! Listen again. A rith is something you *wear* on your *head*. What do you do with a rith?

(Show a picture of a Riv)

This is a Riv.

What is this called?

Correct: A Riv, very nice.

Incorrect: This is a Riv. R-i-v. Let's sound it out together, r-i-v. Now you try! Very good, a riv. Let's keep going.

A Riv is something that you play with.

What do you do with it?

Correct: You play with it, very good.

Incorrect: Let's try again. Listen closely. A Riv is something that you *play with*. What do you do with a Riv?

## **Review of Rith and Riv**

Which one of these is something you wear on your head?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you wear on your head. That's better.

What do you call it?

Correct: Very good, a rith is something you wear on your head.

Incorrect: No, not quite. A *rith* is something you wear on your head. So, try again, What do you call it?

Which of these is something you play with?

Correct: That's right! (move on to naming)

Incorrect: Oh, not quite. This is something you play with. Point to the one you play with

What do you call it?

Correct Response: You're right, a riv is something you play with.

Incorrect Response: No, Wrong one. A *Riv* is something you play with. So, try again. What do you call this?

### **Review of foon, thoon, riv, rith**

(bring back all previously used cards (foon, thoon, riv, rith) )

So far you have learned four words. Let's review all the words we learned. Can you remember them?

If child names all words: Very good, the words we learned are foon, thoon, riv, and rith. Now let's do some tasks to make sure you know them very well!

If child does not name all words: That's a good try. The four words we learned were foon, thoon, rith, and riv. Say them after me. Foon. Thoon. Rith. Riv. Good job. What were our four words again?

Name each word as I point to it.

Rith

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. I'll give you a hint. It starts with the sound "r". (if still no response- continue with: ) Okay, let's go back and talk about this word. This is something that you wear on your head. It's a Rith. What is this picture? A Rith, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Thoon

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: That's not the name of this picture. Do you have another guess for what it is? (if yes- and correct, repeat "thoon" and definition- move on and repeat later). This is something that you write with. It's a thoon. What is this a picture of? A Thoon, very nice. I want you to remember that this is a picture of a thoon- because I will ask you about it later.

Riv

Correct Response: point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Not quite. This is something you play with. It's a Riv. What is this? A Riv, you're right. Now, I want you to remember that this is a picture of a Riv, because I will ask you again later!

Foon

Correct Response: Point to next picture, and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Whoops! Let's try again. This is something else. This is a picture of something you sleep on. It's a foon. What is this a picture of? A Foon, very good. This is a picture of a foon.

Correct Response: When all pictures have been identified with 100% accuracy, move on to the next task.

Incorrect Response Continue to test the words until child has reached 100% accuracy in identifying them.

Good job! Now I'm going to give you a definition, and I want you to point to the picture that goes with that definition. Ready?

Point to something you sleep on.

Correct Response Good Job, A foon is something you sleep on. let's try the next one.

Incorrect Response: No, I'm looking for something that you sleep on. I'll give you a hint. A foon is something you sleep on. So, which one of these pictures is a foon? That one, very good. And what do you do with a foon? You're right, you sleep on it. A foon is something you sleep on.

Point to something you play with.

Correct Response Very nice, a Riv is something you play with. let's try the next one.

Incorrect Response Not quite, I'm looking for a picture of something you play with. Listen closely. A Riv is something you play with. So, which of these pictures is a riv? Good job, that's a riv. And what do you do with a riv? You play with it, that's right. A rith is something you play with.

Point to something you wear on your head.

Correct Response You're right, a Rith is something you wear on your head, let's try the next one.

Incorrect Response I'm looking for something you wear on your head. I'll give you a hint. A rith is something you wear on your head. So, which one of these is a Rith? Good job, that's a rith. And what do you do with a rith? you wear it on your head. A rith is something you wear on your head,

Point to something you write with.

Correct Response Good Job, a thoon is something you write with. let's try the next one.

Incorrect Response Let's try again. I'm looking for something you write with. Listen closely. A thoon is something you write with. Which one of these is thoon? Very good, that's a thoon. And What do you do with a thoon? You write with it, good. A thoon is something you write with.



### **Word Pair 3: Berl and Berld**

(show picture of a berl)

This is a berl.

What is this called?

Correct: A berl, good job.

Incorrect: Almost. This is a berl. B-er-l Let's sound it out together, b-er-l Now you try. Very good, a berl.

A berl is something you wear when you're cold

What do you do with a berl?

Correct: You wear it when you're cold, that's right.

Incorrect: That's not what I said! Listen again. A berl is something you **wear** when you're **cold**. What do you do with a berl?

(Show a picture of a berld)

This is a berld.

What is this called?

Correct: A berld, very nice.

Incorrect: This is a berld. B-er-l-d Let's sound it out together, b-er-l-d. Now you try! Very good, a berld. Let's keep going.

A berld is something you use to eat soup

What do you do with it?

Correct: You use it to eat spout, very good.

Incorrect: Let's try again. Listen closely. A berld is something that you **use to eat soup**. What do you do with a berld?

### **Review of berl and berld**

Which one of these is something you wear when you're cold?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you wear when you're cold. That's better.

What do you call it?

Correct: Very good, a berl is something you wear when you're cold.

Incorrect: No, not quite. A **berl** is something you wear when you're cold. So, try again, What do you call it?

Which of these is something you use to eat soup?

Correct: That's right! (move on to naming)

Incorrect: Oh, not quite. This is something you use to eat soup. Point to the one you use to eat soup.

What do you call it?

Correct Response: You're right, a berld is something you play with.

Incorrect Response: No, Wrong one. A **berld** is something you use to eat soup. So, try again. What do you call this?

## **Review of foon, thoon, riv, rith, berl, berld**

(bring back all previously used cards (foon, thoon, riv, rith, berl, berld) )

So far you have learned six words. Let's review all the words we learned. Can you remember them?

If child names all words: Very good, the words we learned are foon, thoon, riv, rith, berl, and berld. Now let's do some activities to make sure you know them very well!

If child does not name all words: That's a good try. The six words we learned were foon, thoon, rith, riv, berld, and berl. Say them after me. Foon. Thoon. Rith. Riv. Berl. Berld. Good job. What were our six words again?

(Place them in a 3x2 format. These words will have the picture, but no written orthography)

Name each word as I point to it.

Rith

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. I'll give you a hint. It starts with the sound "r". (if still no response- continue with: ) Okay, let's go back and talk about this word. This is something that you wear on your head. It's a Rith. What is this picture? A Rith, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Thoon

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: That's not the name of this picture. Do you have another guess for what it is? (if yes- and correct, repeat "thoon" and definition- move on and repeat later). This is something that you write with. It's a thoon. What is this a picture of? A Thoon, very nice. I want you to remember that this is a picture of a thoon- because I will ask you about it later.

Berld

Correct Response: point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Good try, but that's not the right picture. This is a picture of something you use to eat soup. It's a berld. What is this a picture of? A berld, you're right. Try and remember this, because I will ask you about it later.

Foon

Correct Response: Point to next picture, and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Whoops! Let's try again. This is something else. This is a picture of something you sleep on. It's a foon. What is this a picture of? A Foon, very good. This is a picture of a foon.

Riv

Correct Response: point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Not quite. This is something you play with. It's a Riv. What is this? A Riv, you're right. Now, I want you to remember that this is a picture of a Riv, because I will ask you again later!

Berl

Correct Response: Point to next picture, and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oops! This is something you wear when you're cold. It's a Berl. What is this? A berl, you're right. A berl is something you wear when you're cold. Remember this, because I will ask you about it later.

Correct Response: When all pictures have been identified with 100% accuracy, move on to the next task.

Incorrect Response Continue to test the words until child has reached 100% accuracy in identifying them.

Good job! Now I'm going to give you a definition, and I want you to point to the picture that goes with that definition. Ready?

Point to something you wear when you're cold

Correct Response Good Job, A berl is something you wear when you're cold. let's try the next one.

Incorrect Response: No, I'm looking for something that you wear when you're cold. A berl is something you wear when you're cold. So, which one of these pictures is a berl? A berl, is this one right here. And what do you do with a berl? You wear it when you're cold, good job. A berl is something you wear when you're cold.

Point to something you play with.

Correct Response Very nice, a Riv is something you play with. let's try the next one.

Incorrect Response Not quite, I'm looking for a picture of something you play with. Listen closely. A Riv is something you play with. So, which of these pictures is a riv? Good job, that's a riv. And what do you do with a riv? You play with it, that's right. A rith is something you play with.

Point to something you wear on your head.

Correct Response You're right, a Rith is something you wear on your head, let's try the next one.

Incorrect Response I'm looking for something you wear on your head. I'll give you a hint. A rith is something you wear on your head. So, which one of these is a Rith? Good job, that's a rith. And what do you do with a rith? you wear it on your head. A rith is something you wear on your head,

Point to something you write with.

Correct Response Good Job, a thoon is something you write with. let's try the next one.

Incorrect Response Let's try again. I'm looking for something you write with. Listen closely. A thoon is something you write with. Which one of these is thoon? Very good, that's a thoon. And What do you do with a thoon? You write with it, good. A thoon is something you write with.

Point to something you use to eat soup.

Correct Response You're right, a berld is something you use to eat soup.

Incorrect Response : I'm looking for something you use to eat soup. A berld is something you use to eat soup. Do you know which one of these pictures is something you use to eat soup? It's this one. And what do you do with a berld? You're right, you eat soup with a berld.

Point to something you sleep on.

Correct Response Good Job, A foon is something you sleep on. let's try the next one.

Incorrect Response: No, I'm looking for something that you sleep on. I'll give you a hint. A foon is something you sleep on. So, which one of these pictures is a foon? That one, very good. And what do you do with a foon? You're right, you sleep on it. A foon is something you sleep on.

### **Word Pair 4: Noith and Noi**

(picture of noith)

This is a noith.

What is this called?

Correct Response: Very good, a noith.

Incorrect Response: Almost. This is a noith. N-oi-th. Let's sound it out together. N-oi-th. Very good. Now you try. Good, it's a noith.

A noith is something you brush your teeth with

What do you do with a pathin?

Correct Response: Good job, you use a noith to brush your teeth.

Incorrect Response: Listen closely, and I'll tell you again. Ready? A noith is something you **brush your teeth** with. What do you do with a noith?

(show picture of a noi)

This is a noi.

What is this called?

Correct Response: Nice job, a noi.

Incorrect Response: Not quite! Listen closely. This is a noi. N-oi. Let's sound it out together. N-oi. Now you try. Good job, it's a noi.

A noi is something that you read.

What do you do with a noi?

Correct Response: You read a noi, good job.

Incorrect response: Oh, that's not quite right. Let's try again. A noi is something you **read**. What do you do with a noi?

### **Review of noith and noi**

Which one of these is something you brush your teeth with?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you brush your teeth with. Very good.

What do you call it?

Correct: Very good, a noith is something you brush your teeth with.

Incorrect: No, not quite, a **noith** is something you brush your teeth with. So, try again. What do you call it?

Which one of these is something you read?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you read. Very good.

What do you call it?

Correct: Yes, a noi. A noi is something you read.

Incorrect: Whoops! A **noi** is something you read. So, let's try again. What do you call this?

## **Review of foon, thoon, riv, rith, berl, berld, noith, noi**

(bring back all previously used cards (foon, thoon, riv, rith, berl, berld) )

So far you have learned eight words. Let's review all the words we learned. Can you remember them?

If child names all words: Very good, the words we learned are foon, thoon, riv, rith, berl, berld. Noith and noi. Now let's do some activities to make sure you know them very well!

If child does not name all words: That's a good try. The eight words we learned were foon, thoon, rith, riv, berld, berl, zirdz, and zirz. Say them after me. Foon. Thoon. Rith. Riv. Berl. Berld. Noith noi. Good job. What were our eight words again?

(These words will have the picture, but no written orthography)

Name each word as I point to it.

Berl

Correct Response: Point to next picture, and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oops! This is something you wear when you're cold. It's a Berl. What is this? A berl, you're right. A berl is something you wear when you're cold. Remember this, because I will ask you about it later.

Noi

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Not quite. This is a picture of something you read. It's a noi. What is this a picture of? A noi, you're right. Now, I want you to remember that this is a noi, because I will ask you about it later.

Thoon

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: That's not the name of this picture. This is something that you write with. It's a thoon. What is this a picture of? A Thoon, very nice. I want you to remember that this is a picture of a thoon- because I will ask you about it later.

Berld

Correct Response: point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Good try, but that's not the right picture. This is a picture of something you use to eat soup. It's a berld. What is this a picture of? A berld, you're right. Try and remember this, because I will ask you about it later.

Rith

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's go back and talk about this word. This is something that you wear on your head. It's a Rith. What is this picture? A Rith, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Foon

Correct Response: Point to next picture, and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Whoops! Let's try again. This is something else. This is a picture of something you sleep on. It's a foon. What is this a picture of? A Foon, very good. This is a picture of a foon.

Riv

Correct Response: point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Not quite. This is something you play with. It's a Riv. What is this? A Riv, you're right. Now, I want you to remember that this is a picture of a Riv, because I will ask you again later!

Noith

Correct Response: Point to next picture, and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oops! This is something you brush your teeth with. It's a noith. What is this? You're right, it's a noith. Now, try and remember that this is a noith, because I will ask you about it later.

Correct Response: When all pictures have been identified with 100% accuracy, move on to the next task.

Incorrect Response Continue to test the words until child has reached 100% accuracy in identifying them.

Good job! Now I'm going to give you a definition, and I want you to point to the picture that goes with that definition. Ready?

Point to something you use to brush your teeth.

Correct Response Good Job, a noith is something you use brush your teeth

Incorrect Response: I'm looking for something you use to call people. A noith is something you brush your teeth with. Do you know which one of these is a picture of a noith? It's this one, good job. And what do you do with a noith? You're right, brush your teeth with it. A noith is something you brush your teeth with.

Point to something you sleep on.

Correct Response Good Job, A foon is something you sleep on. let's try the next one.

Incorrect Response: No, I'm looking for something that you sleep on. I'll give you a hint. A foon is something you sleep on. So, which one of these pictures is a foon? That one, very good. And what do you do with a foon? You're right, you sleep on it. A foon is something you sleep on.

Point to something you play with.

Correct Response Very nice, a Riv is something you play with. let's try the next one.

Incorrect Response Not quite, I'm looking for a picture of something you play with. Listen closely. A Riv is something you play with. So, which of these pictures is a riv? Good job, that's a riv. And what do you do with a riv? You play with it, that's right. A rith is something you play with.

Point to something you wear on your head.

Correct Response You're right, a Rith is something you wear on your head, let's try the next one.

Incorrect Response I'm looking for something you wear on your head. I'll give you a hint. A rith is something you wear on your head. So, which one of these is a Rith? Good job, that's a rith. And what do you do with a rith? you wear it on your head. A rith is something you wear on your head,

Point to something you write with.

Correct Response Good Job, a thoon is something you write with. let's try the next one.

Incorrect Response Let's try again. I'm looking for something you write with. Listen closely. A thoon is something you write with. Which one of these is thoon? Very good, that's a thoon. And What do you do with a thoon? You write with it, good. A thoon is something you write with

Point to something you wear when you're cold

Correct Response Good Job, A berl is something you wear when you're cold. let's try the next one.

Incorrect Response: No, I'm looking for something that you wear when you're cold. A berl is something you wear when you're cold. So, which one of these pictures is a berl? A berl, is this one right here. And what do you do with a berl? You wear it when you're cold, good job. A berl is something you wear when you're cold.

Point to something you use to eat soup.

Correct Response You're right, a berld is something you use to eat soup.

Incorrect Response : I'm looking for something you use to eat soup. A berld is something you use to eat soup. Do you know which one of these pictures is something you use to eat soup? It's this one. And what do you do with a berld? You're right, you eat soup with a berld.

Point to something you read.

Correct Response Good Job, A noi is something you read. let's try the next one.

Incorrect Response: Oh, not exactly. I'm looking for something you read. A noi is something you read. Which one of these pictures is a noi? Good job, that's a noi And what do you do with a noi? You read it, you're right, a noi is something you read.



**Recognition Task.**

I am going to show you four different words divided into four little boxes like this (show example). I am going to give you a definition, and I want you to point to the word that you think goes with what I'm saying. Be sure to look at each word before making your choice. I can repeat the word once. I cannot tell you if you are right or wrong until we have finished all three activities. Ready?

point to something you read

Alright, let's try another.

point to something you play with

Alright, let's do the next one.

point to something you write with

Alright, let's try another.

point to something you wear on your head

Alright, let's do the next one.

point to something brush your teeth with

Alright, let's try another.

point to something you use to eat soup

Alright, let's do the next one.

point to something sleep on.

Alright, let's try another.

point to something you wear when you're cold.

Alright, let's do the next one.

### **Structured Production task.**

I am going to read you a sentence about a person who needs help! I need you to listen to what they want to do, and tell me what will help them. I want you to use all the silly words We've learned so far. I can repeat the sentence **one** time, if you need to hear it again. I cannot tell you if you're right or wrong until we have finished all three activities. Are you ready?

1. Taylor wants to write a letter. What should she use to write it? (thoon)
2. Colin loves tomato soup. What should he use if he wants to eat some? (Berld)
3. Susie needs to brush her teeth. What should she use to brush them? (Noith)
4. Doug is going to a baseball game. He wants to put something on his head. What should he use? (Rith)
5. Becca is bored and she wants something to do. What should you give her to play with? (Riv)
6. Jeremy is very cold. What should he wear? (Berl)
7. John wants to read something. What would you give him to read? (Noi)
8. Alyssa is ready to go to sleep. What should she sleep on? (Foon)

**Identification Task**

I am going to show you four different pictures. Some of them are pictures of words we have learned! When I say the name of a picture, I want you to point to it. I cannot tell you if you are right or wrong. I can repeat the word one time if you do not hear me, or would like to hear it again. Do you understand? Ready?

Point to Foon

Point to Noith

Point to Rith

Point to Berld

Point to Riv

Point to Thoon

Point to Noi

Point to Berl

## Session 2

Hello again! Today we are going to be learning 8 more silly words, just like we did yesterday. After I make sure that you know them, we are going to do some different tasks to see how well you remember the new words you learned today, and the words you learned yesterday. Do not worry if you can't remember, just try your best. Tomorrow, I will come back again, and we will learn 8 more words. Are you ready?

### **Word Pair 5: pathin and pafin**

(picture of pathin)

This is a pathin.

What is this called?

Correct Response: Very good, a pathin.

Incorrect Response: Not exactly. Remember that this is a made up word. It's a pathin. P-a-th-i-n. Let's sound it out together. P-a-th-i-n. Now you try. Very nice, a pathin. What is this called?

A pathin is something you cut paper with.

What do you do with a pathin?

Correct Response: Good job, you use a pathin to cut paper.

Incorrect Response: Listen closely, and I'll tell you again. Ready? A pathin is something you *cut paper* with. What do you do with a pathin?

(show picture of a pafin)

Now, be careful, because this is a pafin.

What is this called?

Correct Response: Nice job, a pafin.

Incorrect Response: Not quite! Listen closely. This is a pafin. P-a-f-i-n. Let's sound it out together. P-a-f-i-n. Good job, pafin. What is this called?

A pafin is something you cook food on.

What do you do with a pafin?

Correct Response: You cook food on a pafin, good work.

Incorrect response: Oh, that's not quite right. Let's try again. A pafin is something you *cook food on*. What do you do with a pafin?

### **Review of pathin and pafin.**

Which one of these is something you cook food on?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you cook food on. Very good.

What do you call it?

Correct: Very good, a pafin is something you cook food on.

Incorrect: No, not quite, a *pafin* is something you cook food on. So, try again.

What do you call it?

Which one of these is something you cut paper with?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you cut paper with. Very good.

What do you call it?

Correct: You're right, a pathin is something you cut paper with.

Incorrect: Whoops! A *pathin* is something you cut paper with. So, let's try again.

What do you call this?

(place "pathin" and "pafin" to the side, begin with next minimal pair)

### **Word Pair 6: Zirdz and Zirz**

(picture of zirdz)

This is a zirdz.

What is this called?

Correct Response: Very good, a zirdz.

Incorrect Response: Not exactly. Remember that this is a made up word. It's a zirdz. Z-i-r-d-z. Let's sound it out together. Z-i-r-d-z. Now you try. Very nice, a zirdz. What is this called?

A zirdz is something you throw your trash into.

What do you do with a zirdz?

Correct Response: Good job, you throw trash into a zirdz.

Incorrect Response: Listen closely, and I'll tell you again. Ready? A zirdz is something you **throw your trash into**. What do you do with a zirdz?

(show picture of a zirz)

Now, be careful, because this is a zirz.

What is this called?

Correct Response: Nice job, a zirz.

Incorrect Response: Not quite! Listen closely. This is a zirz. Z-i-r-z. Let's sound it out together. Z-i-r-z. Good job, zirz. What is this called?

A zirz is something you use to call people

What do you do with a zirz?

Correct Response: You use a zirz to call people, good work.

Incorrect response: Oh, that's not quite right. Let's try again. A zirz is something you **use to call people**. What do you do with a zirz?

### **Review of zirdz and zirz.**

Which one of these is something you use to call people

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you use to call people Very good.

What do you call it?

Correct: Very good, a zirz is something you use to call people

Incorrect: No, not quite, a **zirz** is something you use to call people. So, try again.

What do you call it?

Which one of these is something you throw your trash into?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you throw your trash into. Very good.

What do you call it?

Correct: You're right, a zirdz is something you throw your trash into.

Incorrect: Whoops! A **zirdz** is something you throw your trash into. So, let's try again. What do you call this?

(place "pathin" and "pafin" to the side, begin with next minimal pair)

## **Review of Pafin, Pathin, Zirdz, and Zirz**

(Bring back all previously used cards (pafin, pathin, zirdz, zirz))

So far today you have learned four words. Let's review all the words we've learned. Can you remember them?

If the child lists all words: Very good, the words we learned are pafin, pathin, zirdz and zirz. Now let's do some tasks to see if you know them very well!

If the child does not name all words: That's a good try! The four words we learned were pathin, pafin, zirdz and zirz. What were our four words again?

(Place words in a quadrant format. These words will have the picture but no written orthography)  
Name each word as I point to it.

Zirz

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. I'll give you a hint. Let's go back and talk about this word. This is something that you use to call people. It's a zirz. What is this picture? A zirz, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Pafin

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Why don't we talk about the word again? This is something that you cook food on. It's a pafin. What is this picture? A pafin, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Pathin

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Why don't we talk about the word again? This is something that you cut paper with. It's a pathin. Now remember what it looks like- because I'm going to ask you about it again later.

Zirdz

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Not exactly. This is something that you throw your trash into. It's a zirdz. Now remember that this is a zirdz, because I will ask you about it again.

Great job! Now I'm going to give you a definition, and I will ask you to point to the picture that goes with that definition. Ready?

Point to something you use to call people.

Correct Response: Great job, a zirz is something you use to call people. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to call people. A zirz is something you use to call people. which one of these is a zirz? Nice work, that is a zirz. And what do you do with a zirz? You use a zirz to call people, good job.

Point to something you cook food on.

Correct Response: You're right, a pafin is something you cook food on.

Incorrect Response: That's not right. I am looking for something you cook food on. A pafin is something you cook food on. Could you show me which one of these is a pafin? Good job, that is a pafin. And what do you do with a pafin? You cook food on a pafin, you're right.

Point to something you cut paper with.

Correct Response: Great job, a pathin is something you use to cut paper. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to cut paper. A pathin is something you use to cut paper. which one of these is a pathin? You're right, that is a pathin. And what do you do with a pathin? You use a pathin to cut paper, absolutely.

Point to something you throw your trash into.

Correct Response: Great job, a zirdz is something you throw your trash into. Let's try the next one.

Incorrect Response: Oh, no! I am looking for something you throw your trash into. A zirdz is something you throw your trash into. which one of these is a zirdz? You're right, that is a zirdz. And what do you do with a zirdz? Alright, you throw your trash into a zirdz. Good job.



### **Word Pair 7: backsten and baksen**

(picture of backsten)

This is a backsten.

What is this called?

Correct Response: You're right, a backsten.

Incorrect Response: Not exactly. Remember that this is a made up word. It's a backsten. B-a-ck-s-t-e-n. Let's sound it out together. B-a-ck-s-t-e-n. Now you try. Good job, a backsten. So, what is this called?

A backsten is something you use to clean things.

What do you do with a backsten?

Correct Response: Good job, you use a backsten to clean things.

Incorrect Response: Listen closely, and I'll tell you again. Ready? A backsten is something you *clean things* with. What do you do with a backsten?

(show picture of a baksen)

Now, be careful, because this is a baksen.

What is this called?

Correct Response: Nice job, a baksen.

Incorrect Response: Not quite! Listen closely. This is a baksen. B-a-ck-s-e-n.

Let's sound it out together. B-a-ck-s-e-n Good job, a baksen. What is this called?

A baksen is something you sit on.

What do you do with a baksen?

Correct Response: You sit on a baksen, very nice.

Incorrect response: Oh, that's not quite right. Let's try again. A baksen is something you *sit* on. What do you do with a baksen?

### **Review of backsten and baksen.**

Which one of these is something you use to clean things?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you use to clean things. Very good.

What do you call it?

Correct: Very good, a backsten is something you use to clean things.

Incorrect: No, not quite, a *backsten* is something you use to clean things. So, try again. What do you call it?

Which one of these is something cut paper with?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you sit on. Very good.

What do you call it?

Correct: You're right, a baksen is something you sit on.

Incorrect: Whoops! A *baksen* is something you sit on. So, let's try again. What do you call this?

(place "backsten" and "baksen" to the side, begin with next minimal pair)

## **Review of pathin, pafin, zirdz, zirz, backsten, and backsen**

(Bring back all previously used cards)

So far you have learned 6 words. Let's review all the words we have learned. Can you name them?

If child names all words: Good job! Let's get started!

If child does not name all words: That's a good try. The six words we learned were pathin, pafin, zirdz, zirz, backsten, and backsen. Say them with me. Pathin, pafin, zirdz, zirz, backsten, and backsen. Good job. What were our six words again?

Name each word as I point to it.

Pathin

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Okay, let's go back and talk about this word. This is something that you cut paper with. It's a pathin. What is this picture? A pathin, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Zirdz

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, not exactly. This is something you throw your trash into. It's a zirdz. What is this a picture of? A zirdz, very good. Now remember that this is a zirdz- because I will ask you about it later!

Pafin

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oops, that isn't right. This is something that you cook food on. It's a pafin. So, what is this picture? It's a pafin, very nice. A pafin is something you cook on. Now remember that this is a pafin, because I will ask you about it later.

Backsen

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Let's go back and talk about the word. I am looking for something you sit on. A backsen is something you sit on. So, what is this picture? It's a backsen, great job. Now remember that this is a backsen because I will ask you about it later.

Backsten

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Nope! That's not right. I am looking for a backsten. A backsten is something you use to clean things. So, what is this a picture of? A backsten, good job. Now try and remember what a backsten looks like, because I will ask you about it later.

Zirz

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Okay, let's try again! This is something you call people with. It's a zirz. So, what is this a picture of? A zirz, very good. A zirz is something you call people with. Now try your best to remember this, because I will ask you about it later.

Correct Response: When all pictures have been identified with 100% accuracy, move on to the next task.

Incorrect Response: Continue to test the words until child has reached 100% accuracy in identifying them.

Good job! Now I'm going to give you a definition, and I want you to point to the picture that goes with that definition. Ready?

Point to something you cook food on.

Correct Response: You're right, a pafin is something you cook food on.

Incorrect Response: That's not right. I am looking for something you cook food on. A pafin is something you cook food on. Could you show me which one of these is a pafin? Good job, that is a pafin. And what do you do with a pafin? You cook food on a pafin, you're right.

Point to something you use to call people.

Correct Response: Great job, a zirz is something you use to call people. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to call people. A zirz is something you use to call people. Which one of these is a zirz? Nice work, that is a zirz. And what do you do with a zirz? You use a zirz to call people, good job.

Point to something you clean things with

Correct Response: Very good, a backsten is something you use to clean things.

Incorrect Response: Not exactly. I am looking for something you use to clean things. A backsten is something you use to call people. So, which one of these is a backsten? Good job, that is a backsten. And what do you do with a backsten? You use it to clean things, very good.

Point to something you cut paper with.

Correct Response: Great job, a pathin is something you use to cut paper. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to cut paper. A pathin is something you use to cut paper. Which one of these is a pathin? You're right, that is a pathin. And what do you do with a pathin? You use a pathin to cut paper, absolutely.

Point to something you throw your trash into.

Correct Response: Great job, a zirdz is something you throw your trash into. Let's try the next one.

Incorrect Response: Oh, no! I am looking for something you throw your trash into. A zirdz is something you throw your trash into. which one of these is a zirdz? You're right, that is a zirdz. And what do you do with a zirdz? Alright, you throw your trash into a zirdz. Good job.

Point to something you sit on.

Correct Response: Very nice, a backsen is something you sit on. Let's try the next one!

Incorrect Response: Oh, that's not it. I am looking for something you sit on. A backsen is something you sit on. Which one of these is a backsen? Very good, that is a backsen. What do you do with a backsen? You use a backsen to sit on, very good.

### **Word Pair 8: preenas and preena**

(picture of preenas)

This is a preenas.

What is this called?

Correct Response: You're right, a preenas.

Incorrect Response: Oh, that's not it. Listen closely. This is a preenas. P-r-ee-n-a-s. Let's sound it out together. P-r-ee-n-a-s. Very good, a preenas. What is this called?

A preenas is something you use to dig holes

What do you do with a preenas?

Correct Response: Good job, you use a preenas to dig holes.

Incorrect Response: Listen closely, and I'll tell you again. Ready? A preenas is something you **dig holes** with. What do you do with a preenas?

(show picture of a preena)

Now, be careful, because this is a preena.

What is this called?

Correct Response: Nice job, a preena

Incorrect Response: Not quite! Listen closely. This is a preena. P-r-ee-n-a. Let's sound it out together. P-r-ee-n-a. Good job, a preena. What is this called?

A preena is something you drive.

What do you do with a preena?

Correct Response: You drive a preena, that's good.

Incorrect response: Not exactly! I'll tell you again. A preena is something you drive. So, what do you do with a preena?

### **Review of Preenas and Preena**

Which one of these is something you drive?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you drive. Very good.

What do you call it?

Correct: Very good, a preena is something you drive.

Incorrect: No, not quite, a **preena** is something you drive. So, try again. What do you call it?

Which one of these is something you dig holes with?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you dig holes with. Good job.

What do you call it?

Correct: You're right, a preenas is something you dig holes with

Incorrect: Whoops! A **preenas** is something you dig holes with. So, let's try again. What do you call this?

(place "backsten" and "backsen" to the side, begin with next minimal pair)

## **Review of pathin, pafin, zirdz, zirz, backsten, backsen, preenas, and preena**

(Bring back all previously used cards)

So far today you have learned 8 words. Let's review all the words we have learned. Can you name them?

If child names all words: Good job! Let's get started!

If child does not name all words: That's a good try. The six words we learned were pathin, pafin, zirdz, zirz, backsten, backsen, preenas and preena. Say them with me.

Pathin, pafin, zirdz, zirz, backsten, backsen, preenas, and preena.. Good job. What were our six words again?

Name each word as I point to it.

Zirdz

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, not exactly. This is something you throw your trash into. It's a zirdz. What is this a picture of? A zirdz, very good. Now remember that this is a zirdz- because I will ask you about it later!

Preena

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, not exactly. This is something you drive. It's a preena. What is this a picture of? A preena, very good. Now remember that this is a preena- because I will ask you about it later!

Pafin

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oops, that isn't right. This is something that you cook food on. It's a pafin. So, what is this picture? It's a pafin, very nice. A pafin is something you cook on. Now remember that this is a pafin, because I will ask you about it later.

Preenas

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Not exactly. This is something that you dig holes with. It's a preenas. What is this a picture of? A Preenas, that's cery good. Now remember that this is a preenas, because I may ask you about it later.

Backsen

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Let's go back and talk about the word. I am looking for something you sit on. A backsen is something you sit on. So, what is this picture? It's a backsen, great job. Now remember that this is a backsen because I will ask you about it later.

Pathin

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Okay, let's go back and talk about this word. This is something that you cut paper with. It's a pathin. What is this picture? A pathin, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Zirz

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Okay, let's try again! This is something you call people with. It's a zirz. So, what is this a picture of? A zirz, very good. A zirz is something you call people with. Now try your best to remember this, because I will ask you about it later.

Backsten

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Nope! That's not right. I am looking for a backsten. A backsten is something you use to clean things. So, what is this a picture of? A backsten, good job. Now try and remember what a backsten looks like, because I will ask you about it later.

Correct Response: When all pictures have been identified with 100% accuracy, move on to the next task.

Incorrect Response: Continue to test the words until child has reached 100% accuracy in identifying them.

Good job! Now I'm going to give you a definition, and I want you to point to the picture that goes with that definition. Ready?

Point to something you cut paper with.

Correct Response: Great job, a pathin is something you use to cut paper. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to cut paper. A pathin is something you use to cut paper. which one of these is a pathin? You're right, that is a pathin. And what do you do with a pathin? You use a pathin to cut paper, absolutely.

Point to something you drive.

Correct Response: Good. A preena is something you drive. Let's move on to the next one.

Incorrect Response: That's not what I was looking for. I am looking for something you drive. A preena is something you drive. Which one of these is a preena? You're right, that is a preena. And what do you do with it? You drive it, that's right.

Point to something you use to call people.

Correct Response: Great job, a zirz is something you use to call people. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to call people. A zirz is something you use to call people. Which one of these is a zirz? Nice work, that is a zirz. And what do you do with a zirz? You use a zirz to call people, good job.

Point to something you cook food on.

Correct Response: You're right, a pafin is something you cook food on.

Incorrect Response: That's not right. I am looking for something you cook food on. A pafin is something you cook food on. Could you show me which one of these is a pafin? Good job, that is a pafin. And what do you do with a pafin? You cook food on a pafin, you're right.

Point to something you clean things with

Correct Response: Very good, a backsten is something you use to clean things.

Incorrect Response: Not exactly. I am looking for something you use to clean things. A backsten is something you use to call people. So, which one of these is a backsten? Good job, that is a backsten. And what do you do with a backsten? You use it to clean things, very good.

Point to something you throw your trash into.

Correct Response: Great job, a zirdz is something you throw your trash into. Let's try the next one.

Incorrect Response: Oh, no! I am looking for something you throw your trash into. A zirdz is something you throw your trash into. Which one of these is a zirdz? You're right, that is a zirdz. And what do you do with a zirdz? Alright, you throw your trash into a zirdz. Good job.

Point to something you use to dig holes.

Correct Response: Good job, a preenas is something you dig holes with. Let's go on to the next one.

Incorrect Response: That's not right. I am looking for something you use to dig holes. A preenas is something you dig holes with. So, which one of these is a preenas? Very good, that is a preenas. And what do you do with a preenas? Very good, you dig holes with it.

Point to something you sit on.

Correct Response: Very nice, a backsen is something you sit on. Let's try the next one!

Incorrect Response: Oh, that's not it. I am looking for something you sit on. A backsen is something you sit on. Which one of these is a backsen? Very good, that is a backsen. What do you do with a backsen? You use a backsen to sit on, very good.



### **Recognition Task.**

I am going to show you four different pictures divided into four little boxes like this (show example). I am going to give you a definition, and I want you to point to the picture you think goes with what I'm saying. Some of the things I ask you will be from the last session, and some of them will be words you learned today. Be sure to look at each picture before making your choice. I can repeat the word once. I cannot tell you if you are right or wrong until we are finished with all three activities. Ready?

Point to something you drive

Alright, let's do the next one.

point to something you play with

Alright, let's do the next one.

Point to something you cook food on.

Alright, let's do the next one.

Point to something you call people with

Alright, let's try another

point to something you wear when you're cold.

Alright, let's do the next one.

Point to something you dig holes with

Alright, let's do the next one.

Point to something you throw your trash into.

Okay, let's do the next one.

point to something you wear on your head

Alright, let's do the next one.

Point to something you sit on

Okay, let's try another.

point to something brush your teeth with

Alright, let's try another.

point to something you write with

Alright, let's try another.

Point to something you clean things with

Okay, let's do the next one

point to something you use to eat soup

Alright, let's do the next one.

point to something you read

Alright, let's try another.

Point to something you cut paper with.

Okay, let's try the next one.

point to something sleep on.

Alright, let's try another.

### **Structured Production task.**

I am going to read you a sentence about a person who needs help! I need you to listen to what they want to do, and tell me what will help them. I want you to use all the silly words We've learned so far. This might include words from the last session, and words we learned today. I can repeat the sentence **one** time, if you need to hear it again. I cannot tell you if you're right or wrong until we have finished all three activities. Are you ready?

1. Jill's windows are very dirty. What should she use if she wants to clean them? (Baksten)
2. Colin loves tomato soup. What should he use if he wants to eat some? (Berld)
3. Lesley just got tickets to the UK basetball game! She needs to call a friend and invite them to go. What should she use to call them? (Zirz)
4. Gerry wants to cut out some paper hearts for his friends. What should he use to cut the paper? (pathin)
5. Susie needs to brush her teeth. What should she use to brush them? (Noith)
6. Grace wants to plant a garden. What should she use to dig a hole? (Preenas)
7. Brianna needs to drive to the store. What should she drive? (Preena)
8. Doug is going to a baseball game. He wants to put something on his head. What should he use? (Rith)
9. Chris needs to throw away some trash. What should he put it in? (Zirdz)
10. Taylor wants to write a letter. What should she use to write it? (thoon)
11. Becca is bored and she wants something to do. What should you give her to play with? (Riv)
12. Mark wants to cook some food. What should he use to cook on? (Pafin)
13. Jeremy is very cold. What should he wear? (Berl)
14. John wants to read something. What would you give him to read? (Noi)
15. Alyssa is ready to go to sleep. What should she sleep on? (Foon)
16. Julia' wants to sit down. What should she sit on? (Baksen)

### **Identification Task**

I am going to show you four different pictures. Some of them are pictures of words we have learned! When I say the name of a picture, I want you to point to it. I cannot tell you if you are right or wrong. I can repeat the word one time if you do not hear me, or would like to hear it again. Do you understand? Ready?

Point to Berld  
Point to Foon  
Point to Thoon  
Point to Noi  
Point to backsten  
Point to zirz  
Point to pathin  
Point to Berl  
Point to preenas  
Point to preena  
Point to Noith  
Point to backsen  
Point to rith  
Point to pafin  
Point to zirdz  
Point to Riv

### Session 3

Hello again! Today we are going to be learning 8 more silly words, just like we did the last few days. After I make sure that you know them, we are going to do some different tasks to see how well you remember the new words you learned today, and the words you learned the last few days. Do not worry if you can't remember, just try your best. Tomorrow, I will come back one more time, but we will not learn any new words. We will just see how well you remember the words I have taught you over the last 3 days. Are you ready?

**Word Pair 9: etaf and eta**

(picture of eta)

This is an eta

What is this called?

Correct Response: Very good, an eta

Incorrect Response: Not exactly. Remember that this is a made up word. It's an eta. E-t-a. Let's sound it out together. E-t-a. Now you try. Very nice, an eta. What is this called?

An eta is something you use to turn the light on

What do you do with an eta?

Correct Response: Good job, you use an eta to turn the light on

Incorrect Response: Listen closely, and I'll tell you again. Ready? An eta is something you use to turn the light on. What do you do with an eta?

(show picture of a etaf)

Now, be careful, because this is an etaf

What is this called?

Correct Response: Nice job, an etaf

Incorrect Response: Not quite! Listen closely. This is a etaf. E-t-a-f. Let's sound it out together. E-t-a-f. Good job, etaf. What is this called?

An etaf is something you use to blow bubbles

What do you do with an etaf?

Correct Response: You blow bubbles with an etaf, that's right.

Incorrect response: Oh, that's not quite right. Let's try again. An etaf is something you **blow bubbles with**. What do you do with an etaf?

**Review of eta and etaf.**

Which one of these is something you blow bubbles with?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you blow bubbles with. Very good.

What do you call it?

Correct: Very good, an etaf is something you blow bubbles with

Incorrect: No, not quite, an etaf is something you blow bubbles with. So, try again. What do you call it?

Which one of these is something you use to turn the lights on?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you use to turn the lights on. Very good.

What do you call it?

Correct: You're right, an eta is something you use to turn the lights on.

Incorrect: Whoops! An eta is something you use to turn the lights on So, let's try again. What do you call this?

(begin with next minimal pair)

### **Word Pair 10: Maither and Maiver**

(picture of maither)

This is a maither.

What is this called?

Correct Response: Very good, a maither.

Incorrect Response: Not exactly. Remember that this is a made up word. It's a maither. M-ai-th-er. Let's sound it out together. M-ai-th-er. Now you try. Very nice, a maither. What is this called?

A maither is something you drink out of.

What do you do with a maither?

Correct Response: Good job, you drink out of a maither.

Incorrect Response: Listen closely, and I'll tell you again. Ready? A maither is something you ***drink out of***. What do you do with a maither?

Now, be careful, because this is a maiver

What is this called?

Correct Response: Nice job, a maiver.

Incorrect Response: Not quite! Listen closely. This is a maiver. M-ai-v-er. Let's sound it out together. M-ai-v-er. Good job, maiver. What is this called?

A maiver is something you use to wash your hair

What do you do with a maiver?

Correct Response: You use a maiver to wash your hair, good work.

Incorrect response: Oh, that's not quite right. Let's try again. A maiver is something you ***wash your hair with***. What do you do with a maiver?

### **Review of maither and maiver.**

Which one of these is something you drink out of

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you drink out of. Very good.

What do you call it?

Correct: Very good, a maither is something you drink out of.

Incorrect: No, not quite, a ***maither*** is something you drink out of. So, try again.

What do you call it?

Which one of these is something you use to wash your hair?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you use to wash your hair. Very good.

What do you call it?

Correct: You're right, a maiver is something you use to wash your hair

Incorrect: Whoops! A ***maiver*** is something you wash your hair with. So, let's try again. What do you call this?

(begin with next minimal pair)

## **Review of etaf, eta, maiver, and mather**

(Bring back all previously used cards )

So far today you have learned four words. Let's review all the words we've learned. Can you remember them?

If the child lists all words: Very good, the words we learned are etaf, eta, maiver and maither. Now let's do some tasks to see if you know them very well!

If the child does not name all words: That's a good try! The four words we learned were etaf, eta, maiver and maither. What were our four words again?

(Place words in a quadrant format. These words will have the picture but no written orthography)  
Name each word as I point to it.

Maither

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. I'll give you a hint. Let's go back and talk about this word. This is something that you drink out of. It's a maither. What is this picture? A maither, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Etaf

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Why don't we talk about the word again? This is something that you use to blow bubbles. It's an etaf. What is this picture? An etaf, good job. Now remember what it looks like- because I'm going to ask you about it again later.

Eta

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Why don't we talk about the word again? This is something that you use to turn a light on. It's an eta. Now remember what it looks like- because I'm going to ask you about it again later.

Maiver

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Not exactly. This is something that you use to wash your hair. It's a maiver. Now remember that this is a maiver, because I will ask you about it again.

Great job! Now I'm going to give you a definition, and I will ask you to point to the picture that goes with that definition. Ready?

Point to something you drink out of

Correct Response: Great job, a maither is something you drink out of. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you drink out of. A maither is something you use to call people. which one of these is a maither? Nice work, that is a amither. And what do you do with a maither? You use a maither to drink out of, good job.

Point to something you use to turn a light on

Correct Response: You're right, an eta is something you use to turn a light on

Incorrect Response: That's not right. I am looking for something you use to turn a light on. An eta is something you use to turn a light on. Could you show me which one of these is an eta? Good job, that is an eta. And what do you do with an eta? You turn a light on with an eta, you're right.

Point to something you wash your hair with

Correct Response: Great job, a maiver is something you use to wash your hair. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to wash your hair. A maiver is something you use to wash your hair. which one of these is a maiver? You're right, that is a maiver. And what do you do with a maiver? You use a maiver to wash your hair with, absolutely.

Point to something you blow bubbles with

Correct Response: Great job, an etaf is something you blow bubbles with. Let's try the next one.

Incorrect Response: Oh, no! I am looking for something you blow bubbles with. An etaf is something you blow bubbles with. Which one of these is an etaf? You're right, that is an etaf. And what do you do with an etaf? Alright, you blow bubbles with an etaf. Good job.



### **Word Pair 11: Grat and Gra**

(picture of grat)

This is a grat.

What is this called?

Correct Response: You're right, a grat.

Incorrect Response: Not exactly. Remember that this is a made up word. It's a grat. G-r-a-t. Let's sound it out together. G-r-a-t. Now you try. Good job, a grat. So, what is this called?

A grat is something you use to build things

What do you do with a grat?

Correct Response: Good job, you use a grat to build things with

Incorrect Response: Listen closely, and I'll tell you again. Ready? A grat is something you **build things** with. What do you do with a grat?

(show picture of a gra)

Now, be careful, because this is a gra.

What is this called?

Correct Response: Nice job, a gra.

Incorrect Response: Not quite! Listen closely. This is a gra. G-r-a. Let's sound it out together. G-r-a. Good job, a gra. What is this called?

A gra is something you play music with.

What do you do with a gra?

Correct Response: You use a gra to play music, you're right..

Incorrect response: Oh, that's not quite right. Let's try again. A gra is something you **play music with**. What do you do with a gra?

### **Review of grat and gra.**

Which one of these is something you play music with?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you play music with. Very good.

What do you call it?

Correct: Very good, a gra is something you play music with.

Incorrect: No, not quite, a **gra** is something you play music with. So, try again.

What do you call it?

Which one of these is something you use to build things?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you use to build things with. Very good.

What do you call it?

Correct: You're right, a grat is something you use to build things

Incorrect: Whoops! A **grat** is something you use to build things So, let's try again.

What do you call this?

(begin with next minimal pair)

## **Review of etaf, eta, maiver, maither, grat and gra**

(Bring back all previously used cards)

So far you have learned 6 words. Let's review all the words we have learned. Can you name them?

If child names all words: Good job! Let's get started!

If child does not name all words: That's a good try. The six words we learned were etaf, eta, maiver, maither, grat and gra. Say them with me. etaf, eta, maiver, maither, grat and gra. Good job. What were our six words again?

Name each word as I point to it.

Etaf

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Okay, let's go back and talk about this word. This is something that you blow bubbles with. It's an etaf. What is this picture? An etaf good job. Now remember what it looks like- because I'm going to ask you about it again later.

Gra

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, not exactly. This is something you play music with. It's a gra. What is this a picture of? A gra, very good. Now remember that this is a gra- because I will ask you about it later!

Eta

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oops, that isn't right. This is something that you use to turn a light on. It's an eta. So, what is this picture? It's an eta, very nice. A n eta is something you use to turn a light on. Now remember that this is an eta, because I will ask you about it later.

Maiver

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Let's go back and talk about the word. I am looking for something you wash your hair with. A maiver is something you wash your hair with. So, what is this picture? It's a maiver, great job. Now remember that this is a maiver because I will ask you about it later.

Maither

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Nope! That's not right. I am looking for a Maither. A maither is something you drink out of. So, what is this a picture of? A maither, good job. Now try and remember what a maither looks like, because I will ask you about it later.

Grat

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Okay, let's try again! This is something you build things with. It's a grat. So, what is this a picture of? A grat, very good. A grat is something you build things with. Now try your best to remember this, because I will ask you about it later.

Correct Response: When all pictures have been identified with 100% accuracy, move on to the next task.

Incorrect Response: Continue to test the words until child has reached 100% accuracy in identifying them.

Good job! Now I'm going to give you a definition, and I want you to point to the picture that goes with that definition. Ready?

Point to something you play music with

Correct Response: Great job, a gra is something you play music with. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you play music with. A gra is something you play music with. which one of these is a gra? You're right, that is a gra. And what do you do with a gra? You use a gra to play music, you're right.

Point to something you wash your hair with

Correct Response: Great job, a maiver is something you use to wash your hair. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to wash your hair. A maiver is something you use to wash your hair. which one of these is a maiver? You're right, that is a maiver. And what do you do with a maiver? You use a maiver to wash your hair with, absolutely.

Point to something you drink out of

Correct Response: Great job, a maither is something you drink out of. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you drink out of. A maither is something you use to call people. which one of these is a maither? Nice work, that is a maither. And what do you do with a maither? You use a maither to drink out of, good job.

Point to something you blow bubbles with

Correct Response: Great job, an etaf is something you blow bubbles with. Let's try the next one.

Incorrect Response: Oh, no! I am looking for something you blow bubbles with. An etaf is something you blow bubbles with. Which one of these is an etaf? You're right, that is an etaf. And what do you do with an etaf? Alright, you blow bubbles with an etaf. Good job.

Point to something you use to build things.

Correct Response: Very nice, a grat is something you use to build things. Let's try the next one!

Incorrect Response: Oh, that's not it. I am looking for something you use to build things. A grat is something you use to build things. Which one of these is a grat? Very good, that is a grat. What do you do with a grat? You use a grat to build things very good.

Point to something you use to turn a light on

Correct Response: You're right, an eta is something you use to turn a light on

Incorrect Response: That's not right. I am looking for something you use to turn a light on. An eta is something you use to turn a light on. Could you show me which one of these is an eta? Good job, that is an eta. And what do you do with an eta? You turn a light on with an eta, you're right.

### **Word Pair 8: shrum and shum**

(picture of shrum)

This is a shrum.

What is this called?

Correct Response: You're right, a shrum.

Incorrect Response: Oh, that's not it. Listen closely. This is a shrum. Sh-r-u-m.

Let's sound it out together. Sh-r-u-m. Very good, a shrum. What is this called?

A shrum is something you use to buy things

What do you do with a shrum?

Correct Response: Good job, you use a shrum to buy things

Incorrect Response: Listen closely, and I'll tell you again. Ready? A shrum is

something you **buy things** with. What do you do with a shrum?

(show picture of a shum)

Now, be careful, because this is a shum.

What is this called?

Correct Response: Nice job, a shum

Incorrect Response: Not quite! Listen closely. This is a shum. Sh-u-m Let's sound

it out together. Sh-u-m Good job, a shum. What is this called?

A shum is something you keep books on.

What do you do with a shum?

Correct Response: You put books on a shum, that's good.

Incorrect response: Not exactly! I'll tell you again. A shum is something you put books on. So, what do you do with a shum?

### **Review of Shrum and Shum**

Which one of these is something you keep books on?

Correct: Good job. (move on to naming)

Incorrect: Try again. This is something you keep books on. Very good.

What do you call it?

Correct: Very good, a shum is something you keep books on.

Incorrect: No, not quite, shum is something you keep books on. So, try again.

What do you call it?

Which one of these is something you use to buy things?

Correct: Very nice! (move on to naming)

Incorrect: Try again. This is something you use to buy things. Good job.

What do you call it?

Correct: You're right, a shrum is something you use to buy things.

Incorrect: Whoops! A **shrum** is something you use to buy things. So, let's try again. What do you call this?

(begin review)

## **Review of etaf, eta, maiver, maither, grat, gra, shrum, and shum**

(Bring back all previously used cards)

So far you have learned 8 words. Let's review all the words we have learned. Etaf, eta, maiver, maither, grat, gra, shrum, and shum, Can you list them too?

If child names all words: Good job! Let's get started!

If child does not name all words: That's a good try. The eight words we learned were etaf, eta, maiver, maither, grat, gra, shrum, and shum. Say them with me. etaf, eta, maiver, maither, grat, gra shrum, and shum. Good job. What were our eight words again?

Name each word as I point to it.

Eta

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oops, that isn't right. This is something that you use to turn a light on. It's an eta. So, what is this picture? It's an eta, very nice. An eta is something you use to turn a light on. Now remember that this is an eta, because I will ask you about it later.

Gra

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, not exactly. This is something you play music with. It's a gra. What is this a picture of? A gra, very good. Now remember that this is a gra- because I will ask you about it later!

Shrum

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, not exactly. This is something you use to buy things It's a shrum. What is this a picture of? A shrum, very good. Now remember that this is a shrum- because I will ask you about it later!

Etaf

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Okay, let's go back and talk about this word. This is something that you blow bubbles with. It's an etaf. What is this picture? An etaf good job. Now remember what it looks like- because I'm going to ask you about it again later.

Maither

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Nope! That's not right. I am looking for a Maither. A maither is something you drink out of. So, what is this a picture of? A maither, good job. Now try and remember what a maither looks like, because I will ask you about it later.

Grat

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Okay, let's try again! This is something you build things with. It's a grat. So, what is this a picture of? A grat, very good. A grat is something you build things with. Now try your best to remember this, because I will ask you about it later.

Shum

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, not exactly. This is something you put books on. It's a shum. What is this a picture of? A shum, very good. Now remember that this is a shum- because I will ask you about it later!

Maiver

Correct Response: Point to next picture and if this is the last picture, either retest missed pictures, or move on to next task.

Incorrect Response: Oh, that's not right, let's try again. Let's go back and talk about the word. I am looking for something you wash your hair with. A maiver is something you wash your hair with. So, what is this picture? It's a maiver, great job. Now remember that this is a maiver because I will ask you about it later.

Correct Response: When all pictures have been identified with 100% accuracy, move on to the next task.

Incorrect Response: Continue to test the words until child has reached 100% accuracy in identifying them.

Good job! Now I'm going to give you a definition, and I want you to point to the picture that goes with that definition. Ready?

Point to something you wash your hair with

Correct Response: Great job, a maiver is something you use to wash your hair. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to wash your hair. A maiver is something you use to wash your hair. which one of these is a maiver? You're right, that is a maiver. And what do you do with a maiver? You use a maiver to wash your hair with, absolutely.

Point to something you use to turn a light on

Correct Response: You're right, an eta is something you use to turn a light on

Incorrect Response: That's not right. I am looking for something you use to turn a light on. An eta is something you use to turn a light on. Could you show me which one of these is an eta? Good job, that is an eta. And what do you do with an eta? You turn a light on with an eta, you're right.

Point to something you put books on

Correct Response: Great job, a shum is something you put books on. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you put books on. A shum is something you use to call people. which one of these is a shum? Nice work, that is a shum. And what do you do with a shum? You use a shum to put books on.

Point to something you play music with

Correct Response: Great job, a gra is something you play music with. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you play music with. A gra is something you play music with. which one of these is a gra? You're right, that is a gra. And what do you do with a gra? You use a gra to play music, you're right.

Point to something you blow bubbles with

Correct Response: Great job, an etaf is something you blow bubbles with. Let's try the next one.

Incorrect Response: Oh, no! I am looking for something you blow bubbles with. An etaf is something you blow bubbles with. Which one of these is an etaf? You're right, that is an etaf. And what do you do with an etaf? Alright, you blow bubbles with an etaf. Good job.

Point to something you use to buy things.

Correct Response: Great job, a shrum is something you buy things with. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you use to buy things. A shrum is something you use to buy things. Which one of these is a shrum? Nice work, that is a shrum. And what do you do with a shrum? You use a shrum to buy things with, good job.

Point to something you use to build things.

Correct Response: Very nice, a grat is something you use to build things. Let's try the next one!

Incorrect Response: Oh, that's not it. I am looking for something you use to build things. A grat is something you use to build things. Which one of these is a grat? Very good, that is a grat. What do you do with a grat? You use a grat to build things very good.

Point to something you drink out of

Correct Response: Great job, a maither is something you drink out of. Let's try the next one.

Incorrect Response: Not quite. I am looking for something you drink out of. A maither is something you use to call people. which one of these is a maither? Nice work, that is a maither. And what do you do with a maither? You use a maither to drink out of, good job.



### **Recognition Task.**

I am going to show you four different pictures divided into four little boxes like this (show example). I am going to give you a definition, and I want you to point to the picture you think goes with what I'm saying. Some of the things I ask you will be from the last session, and some of them will be words you learned today. Be sure to look at each picture before making your choice. I can repeat the word once. I cannot tell you if you are right or wrong until we are finished with all three activities. Ready?

Point to something you use to turn a light on

okay, let's try another

point to something sleep on.

Alright, let's try another.

Point to something you throw your trash into.

Okay, let's do the next one.

point to something you keep books on

alright, let's do the next one

point to something you play with

Alright, let's do the next one.

Point so something you cook food on.

Alright, let's do the next one.

Point to something you drink out of

okay, let's try another

Point to something you call people with

Alright, let's try another

Point to something you buy things with

Okay, let's try the next one

point to something you wear when you're cold.

Alright, let's do the next one.

Point to something you dig holes with

Alright, let's do the next one.

point to something you wear on your head

Alright, let's do the next one.

Point to something you sit on

Okay, let's try another.

Point to something you blow bubbles with

okay, let's try the next one

Point to something you drive

Alright, let's do the next one.

point to something brush your teeth with

Alright, let's try another.

point to something you play music from

alright, let's try the next one

point to something you build things with

okay, let's try the next one

point to something you write with

Alright, let's try another.

point to something you wash your hair with

Okay, let's try the next one  
Point to something you clean things with  
Okay, let's do the next one  
point to something you use to eat soup  
Alright, let's do the next one.  
point to something you read  
Alright, let's try another.  
Point to something you cut paper with.  
Okay, let's try the next one.

### **Structured Production task.**

I am going to read you a sentence about a person who needs help! I need you to listen to what they want to do, and tell me what will help them. I want you to use all the silly words we've learned so far. This might include words from the last session, and words we learned today. I can repeat the sentence **one** time, if you need to hear it again. I cannot tell you if you're right or wrong until we have finished all three activities. Are you ready?

1. Mark wants to cook some food. What should he use to cook on? (Pafin)
2. Courtney loves music, and really wants to play some. What should she use? (gra)
3. Amal is very cold. What should he wear? (Berl)
4. Isaiah's windows are very dirty. What should she use if she wants to clean them?  
(Baksten)
5. Lesley just got tickets to the UK basketball game! She needs to call a friend and invite them to go. What should she use to call them? (Zirz)
6. Emily wants to build a house. What should she use to build it? (grat)
7. Gerry wants to cut out some paper hearts for his friends. What should he use to cut the paper? (pathin)
8. Zariah needs to brush her teeth. What should she use to brush them? (Noith)
9. Grace wants to plant a garden. What should she use to dig a hole? (Preenas)
10. Nicole just went swimming, and now she needs to wash her hair. What should she use to wash her hair? (maiver)
11. Brianna needs to drive to the store. What should she drive? (Preena)
12. Doug is going to a baseball game. He wants to put something on his head. What should he use? (Rith)
13. Scott is playing with his little sister, and they want to blow bubbles. What should he use?  
(etaf)
14. Juan needs to throw away some trash. What should he put it in? (Zirdz)
15. Taylor wants to write a letter. What should she use to write it? (thoon)
16. Becca is bored and she wants something to do. What should you give her to play with?  
(Riv)
17. John wants to read something. What would you give him to read? (Noi)
18. Alyssa is ready to go to sleep. What should she sleep on? (Foon)
19. Maria wants to sit down. What should she sit on? (Baksen)
20. Carl just got a lot of new books. What should he put them on? (shum)
21. Ashley just got home, and her room is very dark. What should she use to turn on a light?  
(eta)
22. Colin loves tomato soup. What should he use if he wants to eat some? (Berld)
23. Greg just found a toy he really likes, and he wants to buy it. What should he use to buy the toy? (shrum)
24. Aaron is thirsty. What should he use if he wants a drink? (maither)

### **Identification Task**

I am going to show you four different pictures. Some of them are pictures of words we have learned! When I say the name of a picture, I want you to point to it. I cannot tell you if you are right or wrong. I can repeat the word one time if you do not hear me, or would like to hear it again. Do you understand? Ready?

Point to backsen

Point to zirz

Point to Berld

Point to preena

point to grat

Point to Foon

point to shum

point to maither

Point to Thoon

Point to Noi

Point to etaf

Point to backsten

Point to pathin

point to gra

Point to Berl

Point to preenas

Point to Noith

point to eta

point to shrum

Point to rith

Point to pafin

Point to zirdz

Point to Riv

point to maiver

#### Session 4

Welcome back! This is our last day together. Today, you do not need to learn any new words. We are just going to go through all the silly words we have learned together over the last few days. I know that it might be hard for you to remember some of them, but don't worry. Just try your best! Are you ready?

### **Recognition Task.**

I am going to show you four different pictures divided into four little boxes like this (show example). I am going to give you a definition, and I want you to point to the picture you think goes with what I'm saying. Some of the things I ask you will be from the last session, and some of them will be words you learned today. Be sure to look at each picture before making your choice. I can repeat the word once. I cannot tell you if you are right or wrong until we are finished with all three activities. Ready?

Point to something you use to turn a light on

okay, let's try another

point to something sleep on.

Alright, let's try another.

Point to something you throw your trash into.

Okay, let's do the next one.

point to something you keep books on

alright, let's do the next one

point to something you play with

Alright, let's do the next one.

Point so something you cook food on.

Alright, let's do the next one.

Point to something you drink out of

okay, let's try another

Point to something you call people with

Alright, let's try another

Point to something you buy things with

Okay, let's try the next one

point to something you wear when you're cold.

Alright, let's do the next one.

Point to something you dig holes with

Alright, let's do the next one.

point to something you wear on your head

Alright, let's do the next one.

Point to something you sit on

Okay, let's try another.

Point to something you blow bubbles with

okay, let's try the next one

Point to something you drive

Alright, let's do the next one.

point to something brush your teeth with

Alright, let's try another.

point to something you play music from

alright, let's try the next one

point to something you build things with

okay, let's try the next one

point to something you write with

Alright, let's try another.

point to something you wash your hair with

Okay, let's try the next one  
Point to something you clean things with  
Okay, let's do the next one  
point to something you use to eat soup  
Alright, let's do the next one.  
point to something you read  
Alright, let's try another.  
Point to something you cut paper with.  
Okay, let's try the next one.

### **Structured Production task.**

I am going to read you a sentence about a person who needs help! I need you to listen to what they want to do, and tell me what will help them. I want you to use all the silly words we've learned so far. This might include words from the last session, and words we learned today. I can repeat the sentence **one** time, if you need to hear it again. I cannot tell you if you're right or wrong until we have finished all three activities. Are you ready?

1. Mark wants to cook some food. What should he use to cook on? (Pafin)
2. Courtney loves music, and really wants to play some. What should she use? (gra)
3. Amal is very cold. What should he wear? (Berl)
4. Isaiah's windows are very dirty. What should she use if she wants to clean them?  
(Baksten)
5. Lesley just got tickets to the UK basketball game! She needs to call a friend and invite them to go. What should she use to call them? (Zirz)
6. Emily wants to build a house. What should she use to build it? (grat)
7. Gerry wants to cut out some paper hearts for his friends. What should he use to cut the paper? (pathin)
8. Zariah needs to brush her teeth. What should she use to brush them? (Noith)
9. Grace wants to plant a garden. What should she use to dig a hole? (Preenas)
10. Nicole just went swimming, and now she needs to wash her hair. What should she use to wash her hair? (maiver)
11. Brianna needs to drive to the store. What should she drive? (Preena)
12. Doug is going to a baseball game. He wants to put something on his head. What should he use? (Rith)
13. Scott is playing with his little sister, and they want to blow bubbles. What should he use?  
(etaf)
14. Juan needs to throw away some trash. What should he put it in? (Zirdz)
15. Taylor wants to write a letter. What should she use to write it? (thoon)
16. Becca is bored and she wants something to do. What should you give her to play with?  
(Riv)
17. John wants to read something. What would you give him to read? (Noi)
18. Alyssa is ready to go to sleep. What should she sleep on? (Foon)
19. Maria wants to sit down. What should she sit on? (Baksen)
20. Carl just got a lot of new books. What should he put them on? (shum)
21. Ashley just got home, and her room is very dark. What should she use to turn on a light?  
(eta)
22. Colin loves tomato soup. What should he use if he wants to eat some? (Berld)
23. Greg just found a toy he really likes, and he wants to buy it. What should he use to buy the toy? (shrum)
24. Aaron is thirsty. What should he use if he wants a drink? (maither)



### **Identification Task**

I am going to show you four different pictures. Some of them are pictures of words we have learned! When I say the name of a picture, I want you to point to it. I cannot tell you if you are right or wrong. I can repeat the word one time if you do not hear me, or would like to hear it again. Do you understand? Ready?

Point to backsen

Point to zirz

Point to Berld

Point to preena

point to grat

Point to Foon

point to shum

point to maither

Point to Thoon

Point to Noi

Point to etaf

Point to backsten

Point to pathin

point to gra

Point to Berl

Point to preenas

Point to Noith

point to eta

point to shrum

Point to rith

Point to pafin

Point to zirdz

Point to Riv

point to maiver

**Appendix C: Checklists used for Interrater Reliability/ Treatment Fidelity**

**Participant A-1 Session 1**

<b>Task</b>	<b>PI Completed?</b>	<b>Child Response</b>
Introduction	X	X
Introduce Thoon	X	X
Define Thoon	X	X
Introduce Foon	X	X
Define Foon	X	X
Ask write with	X	X
What call it?	X	X
Ask what sleep on	X	X
What call it	X	X

Introduce Rith	X	X
Define Rith	X	X
Introduce Riv	X	X
Define Riv	X	X
Ask wear on head	X	X
What call it?	X	X
Ask what play with	X	X
What call it?	X	X

Child names Rith	X	X
Child names Thoon	X	X
Child Names Riv	X	X
Child Names Foon	X	X
Child identifies sleep on	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X

Introduce Berl	X	X
Define Berl	X	X
Introduce berld	X	X
Define berld	X	X
Ask wear when cold	X	X
What call it?	X	X
Ask what eat soup	X	X
What call it?	X	X

Child names Rith	X	X
Child names Thoon	X	X
Child Names Berl	X	X
Child Names Foon	X	X
Child Names Riv	X	X
Child Names Berld	X	X
Child identifies wear when cold	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X
Child identifies eat soup	X	X
Child identifies sleep on	X	X

Introduce noith	X	X
Define noith	X	X
Introduce noi	X	X
Define noi	X	X
Ask brush teeth	X	X
What call it?	X	X
Ask what read	X	X
What call it?	X	X

Child names Berl	X	X
Child names Noi	X	X
Child Names Thoon	X	X
Child Names Berld	X	X
Child Names Rith	X	X
Child Names Foon	X	X
Child Names Riv	X	X
Child Names Noith	X	X
Child identifies brush teeth	X	X
Child identifies sleep on	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X

Child identifies write with	X	X
Child identifies wear when cold	X	X
Child identifies eat soup	X	X
Child identifies something read	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Something you read	X	X	X
Something play with	X	X	X
Something write with	X	X	X
Something wear on head	X	X	X
Something brush teeth	X	X	X
Something eat soup	X	X	X
Something sleep on	X	X	X
Something wear when cold	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Write letter	X	X	X
Eat soup	X	X	X
Brush teeth	X	X	(says 'first one') X
Wear on head	X	X	X
Play with	X	X	(says 'second') X
Wear when cold	X	X	(says 'first one') X
read	X	X	(says 'second') X
Sleep on	X	X	(says 'second') X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Foon	X	X	X
Noith	X	X	X
Rith	X	X	X
Berld	X	X	X
Riv	X	X	X
Thoon	X	X	X
Noi	X	X	X

Berl	X	X	X
------	---	---	---

**Participant A-1 Session 2**

Task	PI Completed?	Child Response
Introduction	X	X
Introduce pathin	X	X
Define pathin	X	X
Introduce pafin	X	X
Define pafin	X	X
Ask cook on	X	X
What call it?	X	X
Ask cut paper	X	X
What call it	X	X

Introduce Zirdz	X	X
Define zirdz	X	X
Introduce zirz	X	X
Define zirz	X	X
Ask call people	X	X
What call it?	X	X
Ask throw trash into	X	X
What call it?	X	X

Child names Zirz	X	X
Child names Pafin	X	X
Child Names Pathin	X	X
Child Names Zirdz	X	X
Child identifies call people	X	X
Child identifies cook on	X	X
Child identifies cut paper	X	X
Child identifies throw trash into	X	X

Introduce Backsten	X	X
Define backsten	X	X
Introduce backsen	X	X
Define backsen	X	X
Ask clean with	X	X
What call it?	X	X
Ask cut paper	X	X

What call it?	X	X
---------------	---	---

Child names pathin	X	X
Child names Zirdz	X	X
Child Names Pafin	X	X
Child Names backsen	X	X
Child Names backsten	X	X
Child Names zirz	X	X
Child identifies cook on	X	X
Child identifies call people	X	X
Child identifies clean things	X	X
Child identifies cut paper	X	X
Child identifies throw trash into	X	X
Child identifies sit on	X	X

Introduce preenas	X	X
Define preenas	X	X
Introduce preena	X	X
Define preena	X	X
Ask drive	X	X
What call it?	X	X
Ask dig holes	X	X
What call it?	X	X

Child names zirdz	X	X
Child names preena	X	X
Child Names pafin	X	X
Child Names preenas	X	X
Child Names backsen	X	X
Child Names pathin	X	X
Child Names zirz	X	X
Child Names backsten	X	X
Child identifies cut paper	X	X
Child identifies drive	X	X
Child identifies call people	X	X
Child identifies cook food	X	X
Child identifies clean	X	X

things		
Child identifies throw trash into	X	X
Child identifies dig holes	X	X
Child identifies something sit on	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Something you drive	X	X	X
Something play with	X	X	X
Something cook on	X	X	X
Something call people	X	X	X
Something wear when cold	X	X	X
Something dig holes	X	X	X
Something throw trash into	X	X	X
Something wear on head	X	X	X
Something you sit on	X	X	X
Something brush teeth	X	X	X
Something write with	X	X	X
Something clean things	X	X	X
Something eat soup	X	X	X
Something read	X	X	X
Something cut paper	X	X	X
Something sleep on	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Clean window	X	X	X
Eat soup	X	X	X
Call friend	X	X	X
Cut paper	X	X	X
Brush teeth	X	X	X
Dig holes	X	X	X
drive	X	X	X
Wear on head	X	X	X
Throw away trash	X	X	X
Write a letter	X	X	X

Play with	X	X	X
Cook on	X	X	X
Wear when cold	X	X	X
read	X	X	X
Sleep on	X	X	X
Sit on	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Berld	X	X	X
Foon	X	X	X
Thoon	X	X	X
Noi	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Pathin	X	X	X
Berl	X	X	X
Preenas	X	X	X
Preena	X	X	X
Noith	X	X	X
Backsen	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X

### Participant A-1 Session 3

Task	PI Completed?	Child Response
Introduction	X	X
Introduce eta	X	X
Define eta	X	X
Introduce etaf	X	X
Define etaf	X	X
Ask blow bubbles	X	X
What call it?	X	X
Ask turn light on	X	X
What call it	X	X

Introduce maither	X	X
Define maither	X	X
Introduce maiver	X	X
Define maiver	X	X



Ask drink from	X	X
What call it?	X	X
Ask wash hair	X	X
What call it?	X	X

Child names maither	X	X
Child names etaf	X	X
Child Names eta	X	X
Child Names maiver	X	X
Child identifies drink out of	X	X
Child identifies turn light on	X	X
Child identifies wash hair	X	X
Child identifies blow bubbles	X	X

Introduce grat	X	X
Define grat	X	X
Introduce gra	X	X
Define gra	X	X
Ask play music	X	X
What call it?	X	X
Ask build things	X	X
What call it?	X	X

Child names etaf	X	X
Child names gra	X	X
Child Names eta	X	X
Child Names maiver	X	X
Child Names maither	X	X
Child Names grat	X	X
Child identifies play music	X	X
Child identifies wash hair	X	X
Child identifies drink out of	X	X
Child identifies blow bubbles	X	X
Child identifies build things	X	X
Child identifies turn light on	X	X

Introduce shrum	X	X
Define shrum	X	X
Introduce shum	X	X
Define shum	X	X
Ask keep books on	X	X
What call it?	X	X
Ask buy things	X	X
What call it?	X	X

Child names eta	X	X
Child names gra	X	X
Child Names shrum	X	X
Child Names etaf	X	X
Child Names maither	X	X
Child Names grat	X	X
Child Names shum	X	X
Child Names maiver	X	X
Child identifies wash hair	X	X
Child identifies turn light on	X	X
Child identifies put books on	X	X
Child identifies play music	X	X
Child identifies blow bubbles	X	X
Child identifies buy things	X	X
Child identifies build things	X	X
Child identifies drink from	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Something you turn light on	X	X	X
Something sleep on	X	X	X
Something throw trash into	X	X	X
Something keep books on	X	X	X

Something play with	X	X	X
Something cook food on	X	X	X
Something drink out of	X	X	X
Something call people	X	X	X
Something buy things	X	X	X
Something wear when cold	X	X	X
Something dig holes	X	X	X
Something wear on head	X	X	X
Something sit on	X	X	X
Something blow bubbles	X	X	X
Something drive	X	X	X
Something brush teeth	X	X	X
Something play music	X	X	X
Something build things	X	X	X
Something write with	X	X	X
Something wash hair	X	X	X
Something clean things	X	X	X
Something eat soup	X	X	X
Something read	X	X	X
Something cut paper	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Cook on	X	X	X
Plays music	X	X	X
Wear when cold	X	X	X
Clean window	X	X	X
Call friend	X	X	X
Build house	X	X	X
Cut paper	X	X	X
Brush teeth	X	X	X
Dig hole	X	X	X
Wash hair	X	X	X
Drive	X	X	X
Wear on head	X	X	X
Blow bubbles	X	X	X
Throw away trash	X	X	X

Write letter	X	X	X
Play with	X	X	X
Read	X	X	X
Sleep on	X	X	X
Sit on	X	X	X
Put books on	X	X	X
Turn on light	X	X	X
Eat soup	X	X	X
Buy something	X	X	X
Drink out of	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Berld	X	X	X
Preena	X	X	X
Grat	X	X	X
Foon	X	X	X
Shum	X	X	X
Maither	X	X	X
Thoon	X	X	X
Noi	X	X	X
Etaf	X	X	X
Backsten	X	X	X
Pathin	X	X	X
Gra	X	X	X
Berl	X	X	X
Preenas	X	X	X
Noith	X	X	X
Eta	X	X	X
Shrum	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X
Maiver	X	X	X

**Participant A-1 Session 4**

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal</b>	<b>Child Physical</b>
-------------	----------------------	---------------------	-----------------------

		<b>Response</b>	<b>Response</b>
Introduction of Task	X	X	X
Something you turn light on	X	Thickle-etah	X
Something sleep on	X	Backstin	X
Something throw trash into	X	Backsin	X
Something keep books on	X	etahf	X
Something play with	X	graht	X
Something cook food on	X	gaw	X
Something drink out of	X	Grot	X
Something call people	X	? gaween	X
Something buy things	X	ahkarweef	X
Something wear when cold	X	etahf	X
Something dig holes		Etahf	X
Something wear on head	X	Grot	X
Something sit on	X	Grot	X
Something blow bubbles	X	Grot	X
Something drive	X	Etahf	X
Something brush teeth	X	Krwar	X
Something play music	X	Grot	X
Something build things	X	Graw	X
Something write with	X	Grot	X
Something wash hair	X	Grot	X
Something clean things	X	Etahf	X
Something eat soup	X	Grot(p?)	X
Something read	X	Grot	X
Something cut paper	X	grop	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Cook on	X	Cooker	X
Plays music	X	Carnival	X
Wear when cold	X	Etahf	X
Clean window	X	Etahf	X
Call friend	X	Etah	X

Build house	X	Grot	X
Cut paper	X	Graw	X
Brush teeth	X	Etah	X
Dig hole	X	Etahf	X
Wash hair	X	Etahf	X
Drive	X	Etahf	X
Wear on head	X	Etahf	X
Blow bubbles	X	Etahf	X
Throw away trash	X	Etahf	X
Write letter	X	Grot	X
Play with	X	Etah	X
Read	X	Egrot	X
Sleep on	X	Grot	X
Sit on	X	Etah	X
Put books on	X	Grot	X
Turn on light	X	Thriv	X
Eat soup	X	Etahf	X
Buy something	X	etahf	X
Drink out of	X	grot	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Berld	X	X	X
Preena	X	X	X
Grat	X	X	X
Foon	X	X	X
Shum	X	X	X
Maither	X	X	X
Thoon	X	X	X
Noi	X	X	X
Etaf	X	X	X
Backsten	X	X	X
Pathin	X	X	X
Gra	X	X	X
Berl	X	X	X
Preenas	X	X	X
Noith	X	X	X
Eta	X	X	X
Shrum	X	X	X
Rith	X	X	X
Pafin	X	X	X

Zirdz	X	X	X
Riv	X	X	X
Maiver	X	X	X

**Participant A-1 Session 1**

Task	PI Completed?	Child Response
Introduction	X	X
Introduce Thoon	X	X
Define Thoon	X	X
Introduce Foon	X	X
Define Foon	X	X
Ask write with	X	X
What call it?	X	X
Ask what sleep on	X	X
What call it	X	X

Introduce Rith	X	X
Define Rith	X	X
Introduce Riv	X	X
Define Riv	X	X
Ask wear on head	X	X
What call it?	X	X
Ask what play with	X	X
What call it?	X	X

Child names Rith	X	X
Child names Thoon	X	X
Child Names Riv	X	X
Child Names Foon	X	X
Child identifies sleep on	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X

Introduce Berl	X	X
Define Berl	X	X
Introduce berld	X	X

Define berld	X	X
Ask wear when cold	X	X
What call it?	X	X
Ask what eat soup	X	X
What call it?	X	X

Child names Rith	X	X
Child names Thoon	X	X
Child Names Berld	X	X
Child Names Foon	X	X
Child Names Riv	X	X
Child Names Berld	X	X
Child identifies wear when cold	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X
Child identifies eat soup	X	X
Child identifies sleep on	X	X

Introduce noith	X	X
Define noith	X	X
Introduce noi	X	X
Define noi	X	X
Ask brush teeth	X	X
What call it?	X	X
Ask what read	X	X
What call it?	X	X

Child names Berl	X	X
Child names Noi	X	X
Child Names Thoon	X	X
Child Names Berld	X	X
Child Names Rith	X	X
Child Names Foon	X	X
Child Names Riv	X	X
Child Names Noith	X	X
Child identifies brush teeth	X	X
Child identifies sleep	X	X



on		
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X
Child identifies wear when cold	X	X
Child identifies eat soup	X	X
Child identifies something read	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Something you read	X	X	X
Something play with	X	X	X
Something write with	X	X	X
Something wear on head	X	X	X
Something brush teeth	X	X	X
Something eat soup	X	X	X
Something sleep on	X	X	X
Something wear when cold	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Write letter	X	X	X
Eat soup	X	X	X
Brush teeth	X	X	X
Wear on head	X	X	X
Play with	X	X	X
Wear when cold	X	X	X
read	X	X	X
Sleep on	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Foon	X	X	X
Noith	X	X	X

Rith	X	X	X
Berld	X	X	X
Riv	X	X	X
Thoon	X	X	X
Noi	X	X	X
Berl	X	X	X

### Participant A-2 Session 2

Task	PI Completed?	Child Response
Introduction	X	X
Introduce pathin	X	X
Define pathin	X	X
Introduce pafin	X	X
Define pafin	X	X
Ask cook on	X	X
What call it?	X	X
Ask cut paper	X	X
What call it	X	X

Introduce Zirdz	X	X
Define zirdz	X	X
Introduce zirz	X	X
Define zirz	X	X
Ask call people	X	X
What call it?	X	X
Ask throw trash into	X	X
What call it?	X	X

Child names Zirz	X	X
Child names Pafin	X	X
Child Names Pathin	X	X
Child Names Zirdz	X	X
Child identifies call people	X	X
Child identifies cook on	X	X
Child identifies cut paper	X	X
Child identifies throw trash into	X	X

Introduce Backsten	X	X
Define backsten	X	X

Introduce backsen	X	X
Define backsen	X	X
Ask clean with	X	X
What call it?	X	X
Ask cut paper	X	X
What call it?	X	X

Child names pathin	X	X
Child names Zirdz	X	X
Child Names Pafin	X	X
Child Names backsen	X	X
Child Names backsten	X	X
Child Names zirz	X	X
Child identifies cook on	X	X
Child identifies call people	X	X
Child identifies clean things	X	X
Child identifies cut paper	X	X
Child identifies throw trash into	X	X
Child identifies sit on	X	X

Introduce preenas	X	X
Define preenas	X	X
Introduce preena	X	X
Define preena	X	X
Ask drive	X	X
What call it?	X	X
Ask dig holes	X	X
What call it?	X	X

Child names zirdz	X	X
Child names preena	X	X
Child Names pafin	X	X
Child Names preenas	X	X
Child Names backsen	X	X
Child Names pathin	X	X
Child Names zirz	X	X
Child Names backsten	X	X
Child identifies cut paper	X	X
Child identifies drive	X	X

Child identifies call people	X	X
Child identifies cook food	X	X
Child identifies clean things	X	X
Child identifies throw trash into	X	X
Child identifies dig holes	X	X
Child identifies something sit on	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Something you drive	X	X	X
Something play with	X	X	X
Something cook on	X	X	X
Something call people	X	X	X
Something wear when cold	X	X	X
Something dig holes	X	X	X
Something throw trash into	X	X	X
Something wear on head	X	X	X
Something you sit on	X	X	X
Something brush teeth	X	X	X
Something write with	X	X	X
Something clean things	X	X	X
Something eat soup	X	X	X
Something read	X	X	X
Something cut paper	X	X	X
Something sleep on	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Clean window	X	X	X
Eat soup	X	X	X
Call friend	X	X	X
Cut paper	X	X	X
Brush teeth	X	X	X

Dig holes	X	X	X
drive	X	X	X
Wear on head	X	X	X
Throw away trash	X	X	X
Write a letter	X	X	X
Play with	X	X	X
Cook on	X	X	X
Wear when cold	X	X	X
read	X	X	X
Sleep on	X	X	X
Sit on	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Berld	X	X	X
Foon	X	X	X
Thoon	X	X	X
Noi	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Pathin	X	X	X
Berl	X	X	X
Prenas	X	X	X
Preena	X	X	X
Noith	X	X	X
Backsen	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X

### Participant A-2 Session 3

<b>Task</b>	<b>PI Completed?</b>	<b>Child Response</b>
Introduction	X	X
Introduce eta	X	X
Define eta	X	X
Introduce etaf	X	X
Define etaf	X	X
Ask blow bubbles	X	X
What call it?	X	X
Ask turn light on	X	X

What call it	X	X
--------------	---	---

Introduce maither	X	X
Define maither	X	X
Introduce maiver	X	X
Define maiver	X	X
Ask drink from	X	X
What call it?	X	X
Ask wash hair	X	X
What call it?	X	X

Child names maither	X	X
Child names etaf	X	X
Child Names eta	X	X
Child Names maiver	X	X
Child identifies drink out of	X	X
Child identifies turn light on	X	X
Child identifies wash hair	X	X
Child identifies blow bubbles	X	X

Introduce grat	X	X
Define grat	X	X
Introduce gra	X	X
Define gra	X	X
Ask play music	X	X
What call it?	X	X
Ask build things	X	X
What call it?	X	X

Child names etaf	X	X
Child names gra	X	X
Child Names eta	X	X
Child Names maiver	X	X
Child Names maither	X	X
Child Names grat	X	X
Child identifies play music	X	X
Child identifies wash hair	X	X
Child identifies drink out of	X	X

Child identifies blow bubbles	X	X
Child identifies build things	X	X
Child identifies turn light on	X	X

Introduce shrum	X	X
Define shrum	X	X
Introduce shum	X	X
Define shum	X	X
Ask keep books on	X	X
What call it?	X	X
Ask buy things	X	X
What call it?	X	X

Child names eta	X	X
Child names gra	X	X
Child Names shrum	X	X
Child Names etaf	X	X
Child Names maither	X	X
Child Names grat	X	X
Child Names shum	X	X
Child Names maiver	X	X
Child identifies wash hair	X	X
Child identifies turn light on	X	X
Child identifies put books on	X	X
Child identifies play music	X	X
Child identifies blow bubbles	X	X
Child identifies buy things	X	X
Child identifies build things	X	X
Child identifies drink from	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Something you turn	X	X	X

light on			
Something sleep on	X	X	X
Something throw trash into	X	X	X
Something keep books on	X	X	X
Something play with	X	X	X
Something cook food on	X	X	X
Something drink out of	X	X	X
Something call people	X	X	X
Something buy things	X	X	X
Something wear when cold	X	X	X
Something dig holes	X	X	X
Something wear on head	X	X	X
Something sit on	X	X	X
Something blow bubbles	X	X	X
Something drive	X	X	X
Something brush teeth	X	X	X
Something play music	X	X	X
Something build things	X	X	X
Something write with	X	X	X
Something wash hair	X	X	X
Something clean things	X	X	X
Something eat soup	X	X	X
Something read	X	X	X
Something cut paper	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Cook on	X	X	X
Plays music	X	X	X
Wear when cold	X	X	X
Clean window	X	X	X
Call friend	X	X	X
Build house	X	X	X
Cut paper	X	X	X
Brush teeth	X	X	X



Dig hole	X	X	X
Wash hair	X	X	X
Drive	X	X	X
Wear on head	X	X	X
Blow bubbles	X	X	X
Throw away trash	X	X	X
Write letter	X	X	X
Play with	X	X	X
Read	X	X	X
Sleep on	X	X	X
Sit on	X	X	X
Put books on	X	X	X
Turn on light	X	X	X
Eat soup	X	X	X
Buy something	X	X	X
Drink out of	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Berld	X	X	X
Prena	X	X	X
Grat	X	X	X
Foon	X	X	X
Shum	X	X	X
Maither	X	X	X
Thoon	X	X	X
Noi	X	X	X
Etaf	X	X	X
Backsten	X	X	X
Pathin	X	X	X
Gra	X	X	X
Berl	X	X	X
Prenas	X	X	X
Noith	X	X	X
Eta	X	X	X
Shrum	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X
Maiver	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Something you turn	X	Windmill-ale	X

**Participant A-2 Session 4**

light on			
Something sleep on	X	(Uh)-Male	X
Something throw trash into	X	(Uh)-male	X
Something keep books on	X	jale	X
Something play with	X	(Uh)-male	X
Something cook food on	X	(Uh)-male	X
Something drink out of	X	meal	X
Something call people	X	(Uh)-male	X
Something buy things	X	Uh-meal	X
Something wear when cold	X	(uh) male	X
Something dig holes		(uh) meal	X
Something wear on head	X	(uh) male	X
Something sit on	X	(uh) male	X
Something blow bubbles	X	(um) eel	X
Something drive	X	(uh) male	X
Something brush teeth	X	(uh) male	X
Something play music	X	(Uh) male	X
Something build things	X	(Uh) meal	X
Something write with	X	(Uh) male	X
Something wash hair	X	(uh) mah	X
Something clean things	X	(uh) male	X
Something eat soup	X	(uh) maw	X
Something read	X	(uh) meal	X
Something cut paper	X	(uh) male	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Cook on	X	(uh) male	X
Plays music	X	(uh) mal	X
Wear when cold	X	(Uh) mal	X
Clean window	X	(uh) mal	Number 2
Call friend	X	(uh) mal	Number 2
Build house	X	(uh) mal	Number 1
Cut paper	X	(uh) meal	Number 1
Brush teeth	X	(uh) mal	Number 1

Dig hole	X	(uh) mah	Number 2
Wash hair	X	(uh) tuh	Number 1
Drive	X	(uh) muh	Number 2
Wear on head	X	Uh muh	Number 1
Blow bubbles	X	Uh muh	Number 2
Throw away trash	X	Uh muh	Number 1
Write letter	X	Uh mah	Number 1
Play with	X	(uh) muh	Number 2
Read	X	(uh) muh	Number 2
Sleep on	X	(uh) muh	Number 2
Sit on	X	(uh) muh	Number 1
Put books on	X	(Uh) muh	Number 2
Turn on light	X	(Uh) muh	Number 1
Eat soup	X	(uh) muh	Number 2
Buy something	X	(Uh) muh	X
Drink out of		(Uh) muh	Number 2

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Berld	X	X	X
Preena	X	X	X
Grat	X	X	X
Foon	X	X	X
Shum	X	X	X
Maither	X	X	X
Thoon	X	X	X
Noi	X	X	X
Etaf	X	X	X
Backsten	X	X	X
Pathin	X	X	X
Gra	X	X	X
Berl	X	X	X
Preenas	X	X	X
Noith	X	X	X
Eta	X	X	X
Shrum	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X
Maiver	X	X	X

### Participant A-3 Session 1

Task	PI Completed?	Child Response
Introduction	X	X
Introduce Thoon	X	X
Define Thoon	X	X
Introduce Foon	X	X
Define Foon	X	X
Ask write with	X	X
What call it?	X	X
Ask what sleep on	X	X
What call it	X	X

Introduce Rith	X	X
Define Rith	X	X
Introduce Riv	X	X
Define Riv	X	X
Ask wear on head	X	X
What call it?	X	X
Ask what play with	X	X
What call it?	X	X

Child names Rith	X	X
Child names Thoon	X	X
Child Names Riv	X	X
Child Names Foon	X	X
Child identifies sleep on	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X

Introduce Berl	X	X
Define Berl	X	X
Introduce berld	X	X
Define berld	X	X
Ask wear when cold	X	X
What call it?	X	X
Ask what eat soup	X	X

What call it?	X	X
---------------	---	---

Child names Rith	X	X
Child names Thoon	X	X
Child Names Berld	X	X
Child Names Foon	X	X
Child Names Riv	X	X
Child Names Berld	X	X
Child identifies wear when cold	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X
Child identifies eat soup	X	X
Child identifies sleep on	X	X

Introduce noith	X	X
Define noith	X	X
Introduce noi	X	X
Define noi	X	X
Ask brush teeth	X	X
What call it?	X	X
Ask what read	X	X
What call it?	X	X

Child names Berl	X	X
Child names Noi	X	X
Child Names Thoon	X	X
Child Names Berld	X	X
Child Names Rith	X	X
Child Names Foon	X	X
Child Names Riv	X	X
Child Names Noith	X	X
Child identifies brush teeth	X	X
Child identifies sleep on	X	X
Child identifies play with	X	X
Child identifies wear	X	X

on head		
Child identifies write with	X	X
Child identifies wear when cold	X	X
Child identifies eat soup	X	X
Child identifies something read	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Something you read	X	X	X
Something play with	X	X	X
Something write with	X	X	X
Something wear on head	X	X	X
Something brush teeth	X	X	X
Something eat soup	X	X	X
Something sleep on	X	X	X
Something wear when cold	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Write letter	X	X	X
Eat soup	X	X	X
Brush teeth	X	X	X
Wear on head	X	X	X
Play with	X	X	X
Wear when cold	X	X	X
read	X	X	X
Sleep on	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Foon	X	X	X
Noith	X	X	X
Rith	X	X	X
Berld	X	X	X
Riv	X	X	X
Thoon	X	X	X

Noi	X	X	X
Berl	X	X	X

### Participant A-3 Session 2

Task	PI Completed?	Child Response
Introduction	X	X
Introduce pathin	X	X
Define pathin	X	X
Introduce pafin	X	X
Define pafin	X	X
Ask cook on	X	X
What call it?	X	X
Ask cut paper	X	X
What call it	X	X

Introduce Zirdz	X	X
Define zirdz	X	X
Introduce zirz	X	X
Define zirz	X	X
Ask call people	X	X
What call it?	X	X
Ask throw trash into	X	X
What call it?	X	X

Child names Zirz	X	X
Child names Pafin	X	X
Child Names Pathin	X	X
Child Names Zirdz	X	X
Child identifies call people	X	X
Child identifies cook on	X	X
Child identifies cut paper	X	X
Child identifies throw trash into	X	X

Introduce Backsten	X	X
Define backsten	X	X
Introduce backsen	X	X
Define backsen	X	X
Ask clean with	X	X
What call it?	X	X



Ask cut paper	X	X
What call it?	X	X

Child names pathin	X	X
Child names Zirdz	X	X
Child Names Pafin	X	X
Child Names backsen	X	X
Child Names backsten	X	X
Child Names zirz	X	X
Child identifies cook on	X	X
Child identifies call people	X	X
Child identifies clean things	X	X
Child identifies cut paper	X	X
Child identifies throw trash into	X	X
Child identifies sit on	X	X

Introduce preenas	X	X
Define preenas	X	X
Introduce preena	X	X
Define preena	X	X
Ask drive	X	X
What call it?	X	X
Ask dig holes	X	X
What call it?	X	X

Child names zirdz	X	X
Child names preena	X	X
Child Names pafin	X	X
Child Names preenas	X	X
Child Names backsen	X	X
Child Names pathin	X	X
Child Names zirz	X	X
Child Names backsten	X	X
Child identifies cut paper	X	X
Child identifies drive	X	X
Child identifies call people	X	X
Child identifies cook food	X	X

Child identifies clean things	X	X
Child identifies throw trash into	X	X
Child identifies dig holes	X	X
Child identifies something sit on	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Something you drive	X	X	X
Something play with	X	X	X
Something cook on	X	X	X
Something call people	X	X	X
Something wear when cold	X	X	X
Something dig holes	X	X	X
Something throw trash into	X	X	X
Something wear on head	X	X	X
Something you sit on	X	X	X
Something brush teeth	X	X	X
Something write with	X	X	X
Something clean things	X	X	X
Something eat soup	X	X	X
Something read	X	X	X
Something cut paper	X	X	X
Something sleep on	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Clean window	X	X	X
Eat soup	X	X	X
Call friend	X	X	X
Cut paper	X	X	X
Brush teeth	X	X	X
Dig holes	X	X	X
drive	X	X	X
Wear on head	X	X	X
Throw away trash	X	X	X

Write a letter	X	X	X
Play with	X	X	X
Cook on	X	X	X
Wear when cold	X	X	X
read	X	X	X
Sleep on	X	X	X
Sit on	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Berld	X	X	X
Foon	X	X	X
Thoon	X	X	X
Noi	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Pathin	X	X	X
Berl	X	X	X
Preenas	X	X	X
Preena	X	X	X
Noith	X	X	X
Backsen	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X

**Participant A-3 Session 3**

Task	PI Completed?	Child Response
Introduction	X	X
Introduce eta	X	X
Define eta	X	X
Introduce etaf	X	X
Define etaf	X	X
Ask blow bubbles	X	X
What call it?	X	X
Ask turn light on	X	X
What call it	X	X

Introduce maither	X	X
Define maither	X	X
Introduce maiver	X	X

Define maiver	X	X
Ask drink from	X	X
What call it?	X	X
Ask wash hair	X	X
What call it?	X	X

Child names maither	X	X
Child names etaf	X	X
Child Names eta	X	X
Child Names maiver	X	X
Child identifies drink out of	X	X
Child identifies turn light on	X	X
Child identifies wash hair	X	X
Child identifies blow bubbles	X	X

Introduce grat	X	X
Define grat	X	X
Introduce gra	X	X
Define gra	X	X
Ask play music	X	X
What call it?	X	X
Ask build things	X	X
What call it?	X	X

Child names etaf	X	X
Child names gra	X	X
Child Names eta	X	X
Child Names maiver	X	X
Child Names maither	X	X
Child Names grat	X	X
Child identifies play music	X	X
Child identifies wash hair	X	X
Child identifies drink out of	X	X
Child identifies blow bubbles	X	X
Child identifies build things	X	X
Child identifies turn	X	X

light on		
----------	--	--

Introduce shrum	X	X
Define shrum	X	X
Introduce shum	X	X
Define shum	X	X
Ask keep books on	X	X
What call it?	X	X
Ask buy things	X	X
What call it?	X	X

Child names eta	X	X
Child names gra	X	X
Child Names shrum	X	X
Child Names etaf	X	X
Child Names maither	X	X
Child Names grat	X	X
Child Names shum	X	X
Child Names maiver	X	X
Child identifies wash hair	X	X
Child identifies turn light on	X	X
Child identifies put books on	X	X
Child identifies play music	X	X
Child identifies blow bubbles	X	X
Child identifies buy things	X	X
Child identifies build things	X	X
Child identifies drink from	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Something you turn light on	X	X	X
Something sleep on	X	X	X
Something throw trash into	X	X	X
Something keep	X	X	X

books on			
Something play with	X	X	X
Something cook food on	X	X	X
Something drink out of	X	X	X
Something call people	X	X	X
Something buy things	X	X	X
Something wear when cold	X	X	X
Something dig holes	X	X	X
Something wear on head	X	X	X
Something sit on	X	X	X
Something blow bubbles	X	X	X
Something drive	X	X	X
Something brush teeth	X	X	X
Something play music	X	X	X
Something build things	X	X	X
Something write with	X	X	X
Something wash hair	X	X	X
Something clean things	X	X	X
Something eat soup	X	X	X
Something read	X	X	X
Something cut paper	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Cook on	X	X	X
Plays music	X	X	X
Wear when cold	X	X	X
Clean window	X	X	X
Call friend	X	X	X
Build house	X	X	X
Cut paper	X	X	X
Brush teeth	X	X	X
Dig hole	X	X	X
Wash hair	X	X	X
Drive	X	X	X
Wear on head	X	X	X
Blow bubbles	X	X	X

Throw away trash	X	X	X
Write letter	X	X	X
Play with	X	X	X
Read	X	X	X
Sleep on	X	X	X
Sit on	X	X	X
Put books on	X	X	X
Turn on light	X	X	X
Eat soup	X	X	X
Buy something	X	X	X
Drink out of	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Berld	X	X	X
Preena	X	X	X
Grat	X	X	X
Foon	X	X	X
Shum	X	X	X
Maither	X	X	X
Thoon	X	X	X
Noi	X	X	X
Etaf	X	X	X
Backsten	X	X	X
Pathin	X	X	X
Gra	X	X	X
Berl	X	X	X
Preenas	X	X	X
Noith	X	X	X
Eta	X	X	X
Shrum	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X
Maiver	X	X	X

**Participant A-3 Session 4**

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Something you turn light on	X	lightswitch	X
Something sleep on	X	foon	X
Something throw trash into	X	backsin	X
Something keep books on	X	Shumm	X
Something play with	X	Pafin (hard to hear)	X
Something cook food on	X	pathin	X
Something drink out of	X	Cup	X
Something call people	X	Backstin	X
Something buy things	X	Backsin	X
Something wear when cold	X	Barld	X
Something dig holes		shovel	X
Something wear on head	X	hat	X
Something sit on	X	chair	X
Something blow bubbles	X	Shrumm	X
Something drive	X	Car	X
Something brush teeth	X	Dweet? (hard to hear)	X
Something play music	X	Graw	X
Something build things	X	Shrumm	X
Something write with	X	Pencil	X
Something wash hair	X	Shampoo	X
Something clean things	X	backstin	X
Something eat soup	X	Spoon	X
Something read	X	Book	X
Something cut paper	X	Scissors	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Cook on	X	Backsin	X
Plays music	X	graw	X
Wear when cold	X	bearl	X



Clean window	X	wipers	X
Call friend	X	Cellphone	X
Build house	X	Black (?)	X
Cut paper	X	Scissors	X
Brush teeth	X	backsin	X
Dig hole	X	pathin	X
Wash hair	X	Shumm	X
Drive	X	backsin	X
Wear on head	X	hat	X
Blow bubbles	X	backstin	X
Throw away trash	X	Trash bag	X
Write letter	X	pencil	X
Play with	X	doll	X
Read	X	book	X
Sleep on	X	Foom	X
Sit on	X	chair	X
Put books on	X	shelf	X
Turn on light	X	Light swtich	X
Eat soup	X	spoon	X
Buy something	X	backstin	X
Drink out of	X	Cup (yawn)	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Berld	X	X	X
Preena	X	X	X
Grat	X	X	X
Foon	X	X	X
Shum	X	X	X
Maither	X	X	X
Thoon	X	X	X
Noi	X	X	X
Etaf	X	X	X
Backsten	X	X	X
Pathin	X	X	X
Gra	X	X	X
Berl	X	X	X
Preenas	X	X	X
Noith	X	X	X
Eta	X	X	X
Shrum	X	X	X

Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X
Maiver	X	X	X

**Participant B-1 Session 1**

<b>Task</b>	<b>PI Completed?</b>	<b>Child Response</b>
Introduction	X	X
Introduce Thoon	X	X
Define Thoon	X	X
Introduce Foon	X	X
Define Foon	X	X
Ask write with	X	X
What call it?	X	X
Ask what sleep on	X	X
What call it	X	X

Introduce Rith	X	X
Define Rith	X	X
Introduce Riv	X	X
Define Riv	X	X
Ask wear on head	X	X
What call it?	X	X
Ask what play with	X	X
What call it?	X	X

Child names Rith	X	X
Child names Thoon	X	X
Child Names Riv	X	X
Child Names Foon	X	X
Child identifies sleep on	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X

Introduce Berl	X	X
Define Berl	X	X

Introduce berld	X	X
Define berld	X	X
Ask wear when cold	X	X
What call it?	X	X
Ask what eat soup	X	X
What call it?	X	X

Child names Rith	X	X
Child names Thoon	X	X
Child Names Berld	X	X
Child Names Foon	X	X
Child Names Riv	X	X
Child Names Berld	X	X
Child identifies wear when cold	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X
Child identifies eat soup	X	X
Child identifies sleep on	X	X

Introduce noith	X	X
Define noith	X	X
Introduce noi	X	X
Define noi	X	X
Ask brush teeth	X	X
What call it?	X	X
Ask what read	X	X
What call it?	X	X

Child names Berl	X	X
Child names Noi	X	X
Child Names Thoon	X	X
Child Names Berld	X	X
Child Names Rith	X	X
Child Names Foon	X	X
Child Names Riv	X	X
Child Names Noith	X	X
Child identifies brush teeth	X	X

Child identifies sleep on	X	X
Child identifies play with	X	X
Child identifies wear on head	X	X
Child identifies write with	X	X
Child identifies wear when cold	X	X
Child identifies eat soup	X	X
Child identifies something read	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Something you read	X	X	X
Something play with	X	X	X
Something write with	X	X	X
Something wear on head	X	X	X
Something brush teeth	X	X	X
Something eat soup	X	X	X
Something sleep on	X	X	X
Something wear when cold	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Write letter	X	X	X
Eat soup	X	X	X
Brush teeth	X	X	X
Wear on head	X	X	X
Play with	X	X	X
Wear when cold	X	X	X
read	X	X	X
Sleep on	X	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
Introduction of Task	X	X	X
Foon	X	X	X

Noith	X	X	X
Rith	X	X	X
Berld	X	X	X
Riv	X	X	X
Thoon	X	X	X
Noi	X	X	X
Berl	X	X	X

**Participant B-1 Session 2**

Task	PI Completed?	Child Response
Introduction	X	X
Introduce pathin	X	X
Define pathin	X	X
Introduce pafin	X	X
Define pafin	X	X
Ask cook on	X	X
What call it?	X	X
Ask cut paper	X	X
What call it	X	X

Introduce Zirdz	X	X
Define zirdz	X	X
Introduce zirz	X	X
Define zirz	X	X
Ask call people	X	X
What call it?	X	X
Ask throw trash into	X	X
What call it?	X	X

Child names Zirz	X	X
Child names Pafin	X	X
Child Names Pathin	X	X
Child Names Zirdz	X	X
Child identifies call people	X	X
Child identifies cook on	X	X
Child identifies cut paper	X	X
Child identifies throw trash into	X	X

Introduce Backsten	X	X
Define backsten	X	X
Introduce backsen	X	X
Define backsen	X	X
Ask clean with	X	X
What call it?	X	X
Ask cut paper	X	X
What call it?	X	X

Child names pathin	X	X
Child names Zirdz	X	X
Child Names Pafin	X	X
Child Names backsen	X	X
Child Names backsten	X	X
Child Names zirz	X	X
Child identifies cook on	X	X
Child identifies call people	X	X
Child identifies clean things	X	X
Child identifies cut paper	X	X
Child identifies throw trash into	X	X
Child identifies sit on	X	X

Introduce preenas	X	X
Define preenas	X	X
Introduce preena	X	X
Define preena	X	X
Ask drive	X	X
What call it?	X	X
Ask dig holes	X	X
What call it?	X	X

Child names zirdz	X	X
Child names preena	X	X
Child Names pafin	X	X
Child Names preenas	X	X
Child Names backsen	X	X
Child Names pathin	X	X
Child Names zirz	X	X
Child Names backsten	X	X
Child identifies cut	X	X

paper		
Child identifies drive	X	X
Child identifies call people	X	X
Child identifies cook food	X	X
Child identifies clean things	X	X
Child identifies throw trash into	X	X
Child identifies dig holes	X	X
Child identifies something sit on	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Something you drive	X	X	X
Something play with	X	X	X
Something cook on	X	X	X
Something call people	X	X	X
Something wear when cold	X	X	X
Something dig holes	X	X	X
Something throw trash into	X	X	X
Something wear on head	X	X	X
Something you sit on	X	X	X
Something brush teeth	X	X	X
Something write with	X	X	X
Something clean things	X	X	X
Something eat soup	X	X	X
Something read	X	X	X
Something cut paper	X	X	X
Something sleep on	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Clean window	X	X	X
Eat soup	X	X	X
Call friend	X	X	X

Cut paper	X	X	X
Brush teeth	X	X	X
Dig holes	X	X	X
drive	X	X	X
Wear on head	X	X	X
Throw away trash	X	X	X
Write a letter	X	X	X
Play with	X	X	X
Cook on	X	X	X
Wear when cold	X	X	X
read	X	X	X
Sleep on	X	X	X
Sit on	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Berld	X	X	X
Foon	X	X	X
Thoon	X	X	X
Noi	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Pathin	X	X	X
Berl	X	X	X
Preenas	X	X	X
Preena	X	X	X
Noith	X	X	X
Backsen	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X

**Participant B-1 Session 3**

<b>Task</b>	<b>PI Completed?</b>	<b>Child Response</b>
Introduction	X	X
Introduce eta	X	X
Define eta	X	X
Introduce etaf	X	X
Define etaf	X	X
Ask blow bubbles	X	X



What call it?	X	X
Ask turn light on	X	X
What call it	X	X

Introduce maither	X	X
Define maither	X	X
Introduce maiver	X	X
Define maiver	X	X
Ask drink from	X	X
What call it?	X	X
Ask wash hair	X	X
What call it?	X	X

Child names maither	X	X
Child names etaf	X	X
Child Names eta	X	X
Child Names maiver	X	X
Child identifies drink out of	X	X
Child identifies turn light on	X	X
Child identifies wash hair	X	X
Child identifies blow bubbles	X	X

Introduce grat	X	X
Define grat	X	X
Introduce gra	X	X
Define gra	X	X
Ask play music	X	X
What call it?	X	X
Ask build things	X	X
What call it?	X	X

Child names etaf	X	X
Child names gra	X	X
Child Names eta	X	X
Child Names maiver	X	X
Child Names maither	X	X
Child Names grat	X	X
Child identifies play music	X	X
Child identifies wash hair	X	X

Child identifies drink out of	X	X
Child identifies blow bubbles	X	X
Child identifies build things	X	X
Child identifies turn light on	X	X

Introduce shrum	X	X
Define shrum	X	X
Introduce shum	X	X
Define shum	X	X
Ask keep books on	X	X
What call it?	X	X
Ask buy things	X	X
What call it?	X	X

Child names eta	X	X
Child names gra	X	X
Child Names shrum	X	X
Child Names etaf	X	X
Child Names maither	X	X
Child Names grat	X	X
Child Names shum	X	X
Child Names maiver	X	X
Child identifies wash hair	X	X
Child identifies turn light on	X	X
Child identifies put books on	X	X
Child identifies play music	X	X
Child identifies blow bubbles	X	X
Child identifies buy things	X	X
Child identifies build things	X	X
Child identifies drink from	X	X

Task	PI Completed?	Child Verbal Response	Child Physical Response
------	---------------	-----------------------	-------------------------

Introduction of Task	X	X	X
Something you turn light on	X	X	X
Something sleep on	X	X	X
Something throw trash into	X	X	X
Something keep books on	X	X	X
Something play with	X	X	X
Something cook food on	X	X	X
Something drink out of	X	X	X
Something call people	X	X	X
Something buy things	X	X	X
Something wear when cold	X	X	X
Something dig holes	X	X	X
Something wear on head	X	X	X
Something sit on	X	X	X
Something blow bubbles	X	X	X
Something drive	X	X	X
Something brush teeth	X	X	X
Something play music	X	X	X
Something build things	X	X	X
Something write with	X	X	X
Something wash hair	X	X	X
Something clean things	X	X	X
Something eat soup	X	X	X
Something read	X	X	X
Something cut paper	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Cook on	X	X	X
Plays music	X	X	X
Wear when cold	X	X	X
Clean window	X	X	X
Call friend	X	X	X
Build house	X	X	X

Cut paper	X	X	X
Brush teeth	X	X	X
Dig hole	X	X	X
Wash hair	X	X	X
Drive	X	X	X
Wear on head	X	X	X
Blow bubbles	X	X	X
Throw away trash	X	X	X
Write letter	X	X	X
Play with	X	X	X
Read	X	X	X
Sleep on	X	X	X
Sit on	X	X	X
Put books on	X	X	X
Turn on light	X	X	X
Eat soup	X	X	X
Buy something	X	X	X
Drink out of	X	X	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Berld	X	X	X
Preena	X	X	X
Grat	X	X	X
Foon	X	X	X
Shum	X	X	X
Maither	X	X	X
Thoon	X	X	X
Noi	X	X	X
Etaf	X	X	X
Backsten	X	X	X
Pathin	X	X	X
Gra	X	X	X
Berl	X	X	X
Preenas	X	X	X
Noith	X	X	X
Eta	X	X	X
Shrum	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X

Riv	X	X	X
Maiver	X	X	X

**Participant B-1 Session 4**

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Something you turn light on	X	noith	X
Something sleep on	X	Foon	X
Something throw trash into	X	Noith	X
Something keep books on	X	? preen	X
Something play with	X	Noith	X
Something cook food on	X	Noith	X
Something drink out of	X	Mayver	X
Something call people	X	Noith	X
Something buy things	X	Shumm	X
Something wear when cold	X	Noith	X
Something dig holes		Prenou	X
Something wear on head	X	Noith	X
Something sit on	X	Noi(th?)	X
Something blow bubbles	X	Mayther	X
Something drive	X	Preena	X
Something brush teeth	X	Noith	X
Something play music	X	Prenu ?	X
Something build things	X	Noith	X
Something write with	X	Foon	X
Something wash hair	X	Mayver	X
Something clean things	X	Foon	X
Something eat soup	X	Berald	X
Something read	X	Noi	X

Something cut paper	X	mayther	X
---------------------	---	---------	---

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Cook on	X	Mayther	X
Plays music	X	mm-mearl	X
Wear when cold	X	Noith	X
Clean window	X	Noith	X
Call friend	X	Mearl	X
Build house	X	Noith	X
Cut paper	X	Noi (?)	X
Brush teeth	X	bearl	X
Dig hole	X	Preena (?)	X
Wash hair	X	Mayther	X
Drive	X	Preena (?)	X
Wear on head	X	Bearl	X
Blow bubbles	X	Mayther	X
Throw away trash	X	Mayther	X
Write letter	X	Foon	X
Play with	X	Bearl	X
Read	X	Noi (ahhh)	X
Sleep on	X	foon	X
Sit on	X	Noith (?)	X
Put books on	X	shumm	X
Turn on light	X	Thoon (?)	X
Eat soup	X	Berald	X
Buy something	X	Shrumm	X
Drink out of	X	Mav-mayther	X

<b>Task</b>	<b>PI Completed?</b>	<b>Child Verbal Response</b>	<b>Child Physical Response</b>
Introduction of Task	X	X	X
Backsten	X	X	X
Zirz	X	X	X
Berld	X	X	X
Preena	X	X	X
Grat	X	X	X
Foon	X	X	X
Shum	X	X	X
Maither	X	X	X
Thoon	X	X	X
Noi	X	X	X
Etaf	X	X	X

Backsten	X	X	X
Pathin	X	X	X
Gra	X	X	X
Berl	X	X	X
Preenas	X	X	X
Noith	X	X	X
Eta	X	X	X
Shrum	X	X	X
Rith	X	X	X
Pafin	X	X	X
Zirdz	X	X	X
Riv	X	X	X
Maiver	X	X	X

## REFERENCES

- Alt, M., & Plante, E. (2006). Factors that influence lexical and semantic fast mapping of young participants with specific language impairment. *Journal of Speech, Language, and Hearing Research, 49*, 941 – 954.
- Anderson, R. C., & Nagy, W. E. (1991). Word meanings. *Handbook of reading research 2*, 690-724
- Apel, K., & Thomas-Tate, S. (2009). Morphological Awareness Skills of Fourth-Grade African American Participants. *Language, Speech, and Hearing Services in Schools, 40*, 312-324.
- Bauman-Waengler, J. (2012). *Articulatory and phonological impairments: A clinical focus* (4th ed.) Upper Saddle River, NJ: Pearson Education Inc.
- Behling, O. (1998). Employee Selection: Will Intelligence and Conscientiousness Do the Job?. *The Academy of Management Executive, 12* (1), 77-86.
- Carey, S. (1978). The child as word learner. In M. Halle, J. Bresman, & G. Miller (Eds.), *Linguistic theory and psychological reality* (pp. 265-293). Cambridge, MA: MIT Press.
- Carey, S., & Bartlett, E. (1978). Acquiring a single new word. *Papers and Reports in Child Language Development, 15*, 17–29.
- Carter, P. (2007). Phonetic Variation and Speaker Agency: Mexicana Identity in a North Carolina Middle School. *University of Pennsylvania Working Papers in Linguistics, 13* (2) 1-14.
- Carroll, J. B. (1993). *Human cognitive abilities: A survey of factor-analytic studies*. New York: Cambridge University Press.
- Charity, A., Scarborough, H., & Griffin, D. (2004). Familiarity with school English in African American children and its relation to early reading achievement. *Child Development, 75*, 1340–1356.
- Children in Poverty By Race and Ethnicity* (2013). Retrieved from <http://datacenter.kidscount.org/data/tables/44-children-in-poverty-by-race-and-ethnicity#detailed/1/any/false/36,868,867,133,38/10,11,9,12,1,13,185/324,323>
- Coyne, M. D., McCoach, B., & Kapp, S. (2007). Vocabulary intervention for kindergarten students: Comparing extended instruction to embedded instruction and incidental exposure. *Learning Disability Quarterly, 30*, 74–88.



- Craig, H., Thompson, C., Washington, J., & Potter, S. (2003). Phonological Features of Participant African American English. *Journal of Speech, Language, and Hearing Research, 46*, 623-635.
- Cunningham, A., & Stanovich, K. (1997). Early Reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology, 33*, 934-945.
- Dunn, L. M. & Dunn, D. M. (2007). PPVT-4 Manual. Bloomington, MN: NCS Pearson, Inc.
- Enrollment and percentage distribution of enrollment in public elementary and secondary schools, by race/ethnicity: Selected years, fall 1995 through fall 2023* (2013). Retrieved from [http://nces.ed.gov/programs/coe/indicator\\_cge.asp#info](http://nces.ed.gov/programs/coe/indicator_cge.asp#info)
- Ensminger, M., Forrest, C., Riley, A., Kang, M., Green, B., Starfield, B., & Ryan, S. (2000). The Validity of Measures of Socioeconomic Status of Adolescents. *Journal of Adolescent Research, 15* (3), 392-419.
- Fourth graders who scored below proficient reading level by family income.* (2014, January). Retrieved from <http://datacenter.kidscount.org/data/tables/5125-fourth-graders-who-scored-below-proficient-reading-level-by-familyincome#detailed/1/any/false/36,867,38/1171/11558>
- Goldman, R., & Fristoe, M. (2000). Goldman Fristoe Test of Articulation-2 Manual. Circle Pines, MN: American Guidance Service, Inc.
- Griffith, J., Dietz, A., & Weissling, K. (2014). Supporting Narrative Retells for People With Aphasia Using Augmentative and Alternative Communication: Photographs or Line Drawings? Text or No Text?. *American Journal of Speech-Language Pathology, 23*, S213- S224. Doi: 10.1044/2014\_AJSLP-13-0089
- Hart, B., & Risely, T.R. (1995). *Meaningful differences in the everyday experience of young American children.* Baltimore, MD: Paul H. Brooks.
- Hemphill, L., & Tivnan, T. (2008). The Importance of Early Vocabulary for Literacy Achievement in High-Poverty Schools, *Journal of Education for Students Placed at Risk, 13* (4), 426-451. Doi: 10.1080/10824660802427710
- Jarmulowicz, L., Taran, V., & Seek, J. (2012). Metalinguistics, Stress Accuracy, and Word Reading: Does Dialect Matter?. *Language, Speech, and Hearing Services in Schools, 43*, 410-423
- Kan, P.F., & Windsor, J. (2010). Word learning in children with primary language impairment: A meta-analysis. *Journal of Speech, Language and Hearing Research, 53*, 739-756. Doi: 10.1044/1092-4388(2009/08-0248)

- Kanaley, R. (2002). This Week's Web Winners: Talk about Talk. Knight Ridder. *Philadelphia Inquirer*.
- Kelly, H., & Armstrong, L. (2009). New word learning in people with aphasia. *Aphasiology*, 23 (12), 1398-1417
- McMurray, B. (2007, December). Moo-cow! Mummy! More! How do children learn so many words?. *Significance*, 159-163.
- McDonough, C., Song, L., Hirsh-Pasek, K., Golinkoff, R., & Lannon, R. (2011). An image is worth a thousand words: why nouns tend to dominate verbs in early word learning. *Developmental Science*, 14(2), 181-189.
- Nash, H. & Snowling, M. (2006). Teaching new words to participants with poor existing vocabulary knowledge: a controlled evaluation of the definition and context methods. *International Journal of Language & Communication Disorders*, 41(3), 335-354.
- National Center for Education Statistics (2011). *The Nation's Report Card: Reading 2011* (NCES 2012-457). Figure 8., Figure 24.. Institute of Education Sciences, U.S. Department of Education, Washington, D.C.
- Owens, R. (2008). *Language Development An Introduction* (7th ed) Upper Saddle River, NJ: Pearson Education Inc.
- Patton-Terry, N., & Connor, C. (2010). African American English and Spelling: How Do Second Graders Spell Dialect-Sensitive Features of Words?. *Learning Disability Quarterly*, 33(2), 199-210.
- Reynolds, M., & Fish, M. (2010) Language skills in low-SES rural Appalachian children: Kindergarten to middle childhood. *Journal of Developmental Psychology*, 31, 238-248
- Rice, M. L., Oetting, J. B., Marquis, J., Bode, J., & Pae, S. Y. (1994). Frequency of input effects on word comprehension of participants with specific language impairment. *Journal of Speech and Hearing Research*, 37, 106 – 122.
- Ricketts, J., Nation, K., & Bishop, D. (2007). Vocabulary is important for some, but not all reading skills. *Scientific Studies of Reading*, 11, 235-257.
- Semel, E., Wiig, E. H., & Secord, W. A. (2004). *Clinical evaluation of language fundamentals, fifth edition—Screening test (CELF-5 screening test)*. Toronto, Canada: The Psychological Corporation/A Harcourt Assessment Company.
- Seymour, H., Roeper, T., deVilliers, J., & deVilliers, P.A. (2003). *Diagnostic Evaluation of Language Variation Screening Test (DELV screening test)*. San Antonio, Texas: NCS Pearson, Inc

- Spencer, E., & Schuele, S. (2012). An examination of fast mapping skills in preschool children from families with low socioeconomic status. *Clinical Linguistics & Phonetics*, 26 (10), 845-862
- Steele, S.C., & Watkins, R.V. (2010). Learning word meanings during reading by participants with language learning disability and typically-developing peers. *Clinician Linguistics & Phonetics*, 24 (7), 520-539
- Terry, N. (2012). Examining Relationships Among Dialect Variation and Emerging Literacy. *Communication Disorders Quarterly*, 33 (2), 67-77
- Terry, N., Connor, C., Petscher, Y., & Conlin, C. (2012). Dialect Variation and Reading: Is Change in Nonmainstream American English Use Related to Reading Achievement in First and Second Grades?. *Journal of Speech, Language and Hearing Research*, 55, 55-69.
- Terry, N., Connor, C., Thomas- Tate, S., & Love, M. (2010). Examining Relationships Among Dialect Variation, Literacy Skills, and School Context in First Grade. *Journal of Speech, Language, and Hearing Research*, 53, 126-145.
- Terry, N., Mills, M., Bingham, G., Mansour, S., & Marecin, N. (2013). Oral Narrative Performance of African American Prekindergarteners Who Speak Nonmainstream American English. *Language, Speech, and Hearing Services in Schools*, 44 (291-305)
- Washington, J.A., & Craig, H.K. (1994). Dialectal forms during discourse of poor, urban, African American preschoolers. *Journal of Speech and Hearing Research*, 37, 816-823.
- What proportions of student groups are reaching Proficient?* (2013). Retrieved from [http://www.nationsreportcard.gov/reading\\_math\\_2013/#/student-groups](http://www.nationsreportcard.gov/reading_math_2013/#/student-groups)
- Whitehurst, G. J. & Lonigan, C. J., (1998). Child development and emerging literacy. *Child Development*, 3, 848-872.
- Wise, J., Sevick, R., Morris, R., Lovett, M., & Wolf, M. (2007) The Relationship Among Receptive and Expressive Vocabulary, Listening Comprehension, Pre-Reading Skills, and Reading Comprehension by Children With Reading Disabilities. *Journal of Speech, Language, and Hearing Research*, 50, 1093-1109. Doi:10.1044/1092-4388(2007/076)

## **VITA**

Heather Iwinski was born in Augusta, GA. She received her Bachelor of Arts in Communication Sciences and Disorders from Butler University's College of Communication in 2013. She is currently a Master's of Communication Sciences and Disorders graduate student at the University of Kentucky's College of Health Sciences.