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Utilizing Literacy Kits During Home Based Intervention to Foster Development of Familiar Language

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Utilizing Literacy Kits during Home Based Intervention to Foster Development of Familiar

Language

by

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Abstract

Children who are deaf or hard of hearing tend to be delayed in the development of spoken language. The ability to communicate effectively is an important skill children need to succeed throughout their educational experiences. Many of the language concepts children learn are acquired through incidental exposure, such as overhearing. Children with hearing loss often miss language concepts learned through incidental exposure due to poor listening conditions. Early intervention has been shown to be effective in helping children who are deaf or hard of hearing acquire spoken language, especially when there is parental involvement in early intervention. Likewise, early literacy skills are linked to language development. Utilizing literature as a means of expanding and building upon current language development practices may provide additional opportunities for parent-child interaction that will aid children in their future educational environments.

Key Words: Deaf or Hard of Hearing, Language Development, Daily Routines, Early Intervention

Introduction

Children who are deaf or hard of hearing are frequently delayed in language development (Lederberg, Schick, & Spencer, 2013; Marschark, Rhoten, & Fabich, 2007). With improved access to sound through hearing technology as well as direct instruction through early intervention, children with hearing loss have the ability to acquire listening and spoken language skills (Blaiser, 2012; Geers, 2002). This project will provide materials for home based therapy that utilizes literature as a means of building upon language during family daily routines and activities.

Language Development in Children Who are Deaf or Hard of Hearing

A child's exposure to literacy and language plays an important role in developing skills that will enable children to succeed throughout their educational career (Frede, Barnett, & Riley-ayers, 2006). Research shows that children who are deaf or hard of hearing (DHH) typically demonstrate poorer literacy skills than their same-aged hearing peers (Lederberg et al., 2013). Therefore utilizing appropriate intervention strategies is imperative in helping children who are DHH in acquiring language and literacy skills. Findings from the National Reading Panel (2000) and National Institute for Early Education Research (2006) indicate that there are several key factors that influence the development of literacy. Phonemic awareness (a subgroup of phonological awareness) and vocabulary development were among the priorities determined by these two reviews to be crucial components in the development of language and literacy skills.

Phonological Awareness

Phonological awareness involves the ability to manipulate sounds in words and focus on those sounds (DesJardin, Ambrose, & Eisenberg, 2009; Robertson, 2009). Phonological awareness lays the foundation for vocabulary and concept development throughout a lifetime of educational and future careers (Ambrose, Fey, & Eisenberg, 2012; Robertson, 2009). Ambrose et al. (2012) reported that children with cochlear implants frequently are delayed in their development of phonological awareness and print knowledge. Kirk and Gillon (2007) found that children who had been exposed to phonological awareness instruction performed better in morphological awareness tasks (recognition and use of the smallest units of sound which carry meaning), a skill vital in the comprehension of text. A review of research conducted by the U.S. Department of Education examined the effectiveness of various phonological awareness training methods in helping children acquire phonological awareness. They determined three skills that should be targeted to help children acquire phonological awareness. These skills include rhyme detection training, blending training (e.g. putting three separate sounds together to make a word), and segmentation training (e.g. separating a word into its individual sounds). The review of research conducted by the U.S. Department of Education noted that phonological awareness training activities vary in their scope and include a variety of activities intended to enable children to detect and understand sounds in language. The implementation of phonological awareness training may enhance literacy attainment. Phonological awareness may be targeted through utilizing strategies during joint story book reading.

The development of literacy skills is heavily influenced by language development. Children gain important language skills as they acquire literacy including phonological awareness (an individual's understanding that speech is made up of abstract units, and individual phonemes) and print knowledge as well as vocabulary development (Ambrose et al., 2012; J. DesJardin, 2011; Lennox, 2013). Interactive read-alouds provide opportunities for children to acquire basic reading skills, such as phonological awareness (Lennox, 2013). In addition, DesJardin, Ambrose, and Eisenberg (2009) examined the development of early language skills, including phonological awareness and reading ability, due to a mother's use of facilitative language techniques during joint story book reading. Their findings indicated that a mother's use of facilitative language techniques (e.g. recast, open ended questions) positively affected the development of oral and reading vocabulary as well as letter-word recognition and reading passage comprehension. These techniques were also positively related to the development of phonological awareness. They noted during this study that children with stronger vocabulary and syntax skills had a richer representation of word parts which facilitated growth in phonological awareness abilities. Therefore providing parents with strategies they can utilize during joint story book reading can positively impact the development of language and literacy skills.

Vocabulary Development

Vocabulary development is largely related to both reading proficiency and oral language skills (Beck & McKeown, 2007a). For this reason, it is important to provide multiple

opportunities for acquiring vocabulary. Incidental learning and intentional instruction are two strategies that can be used in combination as a means of developing vocabulary.

Incidental learning. Incidental learning is the process of learning something without the intention to do so. Children have the ability to acquire language concepts effectively through incidental exposure during daily routines and activities (Brown, Waring, & Donkaewbua, 2008; Justice, Meier, & Walpole, 2005). Children with hearing loss often miss language concepts learned through incidental exposure due to poor listening conditions (Brown et al., 2008). Targeted instruction of concepts missed due to lack of incidental learning may be a vital component in helping children who are DHH acquire these language concepts. Book reading is one strategy often used to help children acquire new language concepts through intentional instruction (Brown et al., 2008; Justice et al., 2005).

Intentional learning and vocabulary. Vocabulary development is enhanced as literacy skills are acquired. Intentional instruction of vocabulary is effective in aiding vocabulary development (McLeod & McDade, 2010). Wasik and Bond (2001) examined the effects of interactive book reading on vocabulary development. They concluded that children who were involved in interactive book reading opportunities in which vocabulary instruction was intentionally taught scored significantly better on vocabulary measures. Vocabulary is an essential part of literary comprehension (NRP, 2000). Children who are read to on a regular basis encounter vocabulary they learn and are then able to draw from that vocabulary when learning new vocabulary and concepts (Beck & McKeown, 2007b).

Joint story book reading has been shown to be an effective means of building vocabulary as it exposes children to opportunities for increasing their range and understanding of vocabulary words (DesJardin, Ambrose, & Eisenberg, 2009; Lennox, 2013; McLeod & McDade, 2010). Brown et al. (2008) reported that vocabulary could be learned intentionally through different modes of reading literature (reading, reading aloud, and listening to a story). Justice, Meier, and Walpole (2005) explored the use of joint story book reading in providing children with incidental learning of new language concepts. Their findings suggested a definitional approach to language learning (e.g. book reading) in combination with contextual instruction (e.g. learning vocabulary in the context of daily routines and activities) is effective in helping children acquire new language concepts. The very nature of joint book reading gives children interactive communication with language models. Ard and Beverly (2004) examined the effectiveness of joint story book reading in vocabulary acquisition. Their findings indicated that repeated joint story book reading of the same story resulted in new word learning. They also found that receptive word learning occurred with children who heard adults pose questions, comments, or a combination of both during joint story book reading (Ard & Beverly, 2004) This interaction provides opportunity to enhance vocabulary development and build upon current language ability (McLeod & McDade, 2010). One method of shared reading intervention combining joint story book reading with this type of adult interaction is referred to as Dialogic Reading. Dialogic Reading is an interactive shared reading practice focusing on the adult's role as facilitator of the child's role as active story teller rather than that of passive listener (U.S. Department of Education, 2011). In this method, the adult asks the child questions as they read together and makes comments about the story or pictures in the book. The adult then provides feedback to the

child in the form of repetitions, expansions, and modeling of answers. Review of research examining the effects of dialogic reading on the development of language and literacy outcomes indicates that students exposed to this intervention method achieve higher oral language and print knowledge outcomes (National Institute for Literacy, 2008; U.S. Department of Education 2011). Shared reading interventions, such as dialogic reading, provide parents and educators with a method of intentional instruction that successfully fosters language development. Multiple shared reading opportunities with familiar books may have a positive impact on helping children acquire vocabulary and other language skills such as phonological awareness.

Parental Involvement in Early Intervention

Early intervention is an opportunity to provide parents with tools, such as language facilitation techniques, that aid children in developing spoken language. A family centered approach to early intervention is considered to be a crucial component in the foundation of early intervention services (Sass-Lehrer, 2013).

Role of Early Intervention

Early intervention has been shown to be effective for helping children with hearing loss acquire language (Derr, Wiley, & Choo, 2011). It is the goal of Early Hearing Detection and Early Intervention program to increase the number of newborns who are screened for hearing loss by age one month, have diagnostic audiologic evaluation by age 3 months, and enroll children who are Deaf or Hard of Hearing in appropriate intervention services by age 6 months (Joint Committee on Infant Hearing, 2007; White, Forsman, Eichwald & Munoz, 2013). The Joint Committee on Infant Hearing (2007) reported that in the year 2005, every state in the

United States had implemented newborn hearing screening. Now 95% of infants born in the United States are screened for hearing loss before being discharged from the hospital. The EHDI initiative to increase the early identification of children with hearing loss has decreased the age children are identified with hearing loss from 2 ½ - 3 years of age to 2 - 3 months of age (Blaiser, 2012; Gascon, Campbell, & Young, 2010). The early identification of children with hearing loss enables families to begin early intervention during critical language learning years. Deer, Wiley, and Choo (2011) found that children with hearing loss enrolled in early intervention before the age of 6 months were more likely to achieve age appropriate language skills and maintain age appropriate language skills over time regardless of the severity of the hearing loss. Early identification and early intervention services result in significantly better language, speech, and social-emotional development (Yoshinaga-Itano, 2003). Early intervention is an important factor in language development for children who are deaf or hard of hearing. Early intervention becomes more effective when parents are involved in teaching their children spoken language skills. Parents play a key role during early intervention to help their children acquire spoken language.

Impact of Parental Involvement in Early Intervention

Families bring several factors into early intervention that affect language outcomes for children (Holt, Beer, Kronenberger, Pisoni, & Lalonde, 2012; DesJardin et al., 2009). Socio-economic status, educational level of parents, interpersonal relationships of family members, family structure, and parental involvement are all factors that influence potential outcomes of language development during early intervention (Sierau, Brand, & Jungmann, 2012; Holt et al.,

2012). In fact Moeller (2000), found that parental involvement was the most important predictor

of vocabulary development by five years of age for children enrolled in early intervention. The

more involved parents are in early intervention for their children, the better the child will be able

to develop high level vocabulary skills (Moeller, 2000).

Moeller (2011) also states that a primary benefit of early identification is "the opportunity

for the family to prospectively gain knowledge and skills to parent the child in ways that

encourage development" (Moeller, 2011). Parents' inherent use of language facilitation

techniques (e.g. using infant directed speech increasing pitch, shortening utterances, and

lengthening pauses when speaking) help children acquire language skills (Blaiser, 2012). Early

intervention helps parents build upon these inherent skills equipping them with tools they can use

to aid their child's development. Attentive parents who key into opportunities to work on

language targets with their children are able to positively influence language development.

Empirical research supports that as parents are included in early intervention, they are

able to implement learned strategies that positively impact the language development of their

children. Holt et al. (2012) found that the family environment influences cochlear implant

outcomes in both language development and executive function. Specific factors that were

supported as influential factors in early intervention include family support and maternal

influences. Ezell, Justice, and Davida (2000) explored the impact of strategies implemented by

parents during joint story book reading which focused on targeting early literacy skills. They

concluded that strategies implemented during joint story book reading result in notable gains in

the acquisition of early literacy skills. Blaiser (2012) states that "as children are exposed to their

parent's language, they acquire knowledge about the distributional properties of the phonemes of language" (pg.274), which enables them to begin to understand language. Early intervention becomes more effective as parents are utilized as key players in aiding child development of spoken language skills.

Daily Routines in Early Intervention

Routines Based Intervention

Embedding intervention in a child's daily home routines and activities provides meaningful practice opportunities. Daily routines are meaningful contexts for young children to learn new skills because they are predictable, functional, and occur numerous times throughout the day (Woods, Kashinath, & Goldstein, 2004).

Woods et al. (2004) found that identifying intervention strategies that match the child's goals and family's routines enhance the implementation of strategies and increase the sustainability of intervention strategies over time. As parents are given tools to expand early intervention practices regularly in the home, children with hearing loss may be exposed to more meaningful and continuous language learning experiences.

Chao, Bryan, Bustein, and Ergul (2006a) explored the benefits of early intervention using a family centered model in which daily routines and activities were used to implement therapy. They found that children who participated in a family centered model for therapy outperformed peers in language and behavior performance measures. They noted that this type of intervention empowered parents to identify the child's area of need and problem solving strategies to help their child acquire a targeted skill.

Furthermore, Hwang, Chao, and Liu (2006b) examined the effectiveness of utilizing daily routines in intervention compared to traditional home visits in aiding children's development. They concluded that routines-based intervention is more effective in aiding children's development. Goals set by the family were more likely to be achieved when using a routines-based model (Chao et al., 2006b). Integrating therapy into daily routines makes intervention more meaningful to children and parents, creating more opportunities to target language development.

Project Outcomes

This project sought to utilize literature in combination with language facilitation strategies during joint storybook reading as well as activities during daily routines in the home to target vocabulary and language concepts. This was accomplished by 1) providing strategies and materials to parents to facilitate language and literacy in the home environment 2) helping parents understand how books can be used as a means of introducing vocabulary and building upon current language levels and 3) providing additional practice of vocabulary targets for children with hearing loss in meaningful settings that occur regularly each day.

Daily routines were targeted in this project to aid with incidental learning, which includes vocabulary concepts that are often difficult for children with hearing loss to learn. These units were created to help parents utilize literature as a means of introducing and highlighting vocabulary concepts which occur during daily routines in the home. Units were designed to be completed by parents at home over a period of two weeks.

Project Outline

This project included three units centered on the themes Bedtime, Bath time, and Mealtime. Focusing on these three daily routines during book reading and extended activities provided parents with opportunities to teach vocabulary and concepts that may be missed by children with hearing loss while these routines occur during the day. Each unit includes the following:

- Literature corresponding to the daily routine- at least two books in each unit

- Vocabulary targets used during book reading and extended activities

- Dialogic Reading Questions with examples of question types included in each unit as well as on the pages of each unit book

- Hands on activities accompanying each book as it is read

- A list of extended activities to be carried over into daily routines

- Description of Language Facilitation Techniques targeted in extended activities

- Additional tips and resources for building language and early literacy skills

Each of these components provided parents with a variety of ways they could incorporate language building practice for their children into their everyday routines.

Target Vocabulary

Each unit included a list of vocabulary specific to a daily routine. Vocabulary was pulled from the books accompanying each unit. Vocabulary was targeted during story book reading as

well as during extended activities. Each vocabulary list was broken into language categories (e.g.

nouns, verbs, adjectives). Specific examples of how vocabulary was targeted during book

reading and activities are discussed in the sections below. An example of a unit vocabulary list

included in the units can be found in Appendix A.

Reading Questions and Activities

A main focus of this project was to provide parents with reading strategies they could use

to make reading an engaging language building experience for their children. The reading

strategy used for this project is referred to as dialogic reading. This strategy was selected based

on teacher interviews of effective strategies used during reading as well as through research of

best practices for early literacy development. Dialogic reading focuses on a parent's use of

different question types during shared reading. Question types include open ended, wh (who,

what, where, when, why), distancing (relating events in a story to the child), recall (remembering

what has already happened in the story), and completion prompt (filling in the blank). An

explanation and examples of each question type were included in each unit. Specific questions

were posted directly on to the pages of each book to allow parents easy access to question

prompts as they read with their child.

A list of extended reading activities was also created for these units. Extended activities

involved hands on activities accompanying each book as it was read as well as puzzles targeting

phonologic awareness skills. The phonological awareness puzzles focused on three skills

research suggests are important in developing phonological awareness (U.S. Department of

Education, 2012). These skills include rhyme detection, blending (e.g. saying three sounds and

combining them to make a word), and segmenting (e.g. separating a word into its different

sounds). An example of each puzzle as well as an explanation of how to use each puzzle to target

phonological awareness skills was included in these units. A felt board was attached to the inside

of each binder. Hands-on activities involved visually telling the story in some way as it was read.

For example, felt monsters and different props used during bedtime (e.g. toothbrush, soap, night-

light, etc.) were created for the bed time unit book *Goodnight Little Monster* allowing children to

get their own little monster ready for bed as they read the story. See Appendix B for specific

examples of reading questions and extended reading activities.

Extended Activities and Language Facilitation Techniques

The purpose of the extended activities and the language facilitation techniques was to

provide parents with ideas and strategies they could continue to use on a daily basis to help build

their child's language. Each unit contained a list and description of language building strategies

including parallel talk, self-talk, modeling, expansion, and recast. Parents were provided with

definitions and specific examples of each strategy. Each of these strategies was then incorporated

into an activity parents could carry out during their daily routines at home. Each activity included

at least one specific part of language (e.g. prepositions, basic concepts, etc.) or language building

strategy that could be targeted during the activity. A description of the activity as well as

examples of how to incorporate the language building strategy and language target into the

activity were included in each unit. This provided parents with ideas they could use with their

child to incorporate different language building opportunities throughout their day. An example

of language building strategies and extended activities is included in Appendix C.

Summary

This project was sent home with parents to obtain an initial reaction to the units. A parent feedback form was sent home with the units to be completed after a one week trial with a unit. Questions included in the parent feedback form primarily sought to determine which components were most informative or helpful in providing information about incorporating language building activities into daily routines. Questions also sought to determine which activities were most engaging for children using the units, the length of time parents should be able to use the units in order to provide enough opportunities to utilize resources and information included, and parent suggestions involving modification or additions that could be incorporated into the units which could make them more informative and easy for parents to use. The most positive response to the units was in regard to dialogic reading questions posted directly on the pages of the books. Three of the parents surveyed specifically noted that the question prompts posted in the books helped them engage their child during book reading as they asked questions and talked about the story. One parent explained that remembering to ask questions and comment on a book while reading is difficult for her. She noted that the book questions made it easier for her to think of additional questions and comments as she and her child re-read the books several more times. Other components parents found helpful included language building strategies and extended activities.

This project will be incorporated into a larger scale research project to occur within the next year. Additional units will be created and an analysis of parent response will be conducted to determine the effectiveness of these units in teaching parents how to incorporate language building strategies into daily routines at home.

Discussion

Because children with hearing loss do experience language delays, it is important to find effective strategies for building language. Increasing expressive and receptive vocabulary as well as providing intentional exposure to concepts missed incidentally are important in helping children with hearing loss build language. Parental involvement in early intervention as well as incorporating daily routines into early intervention are vital in helping children acquire language skills. The literacy units created for this project provided parents with strategies they could use during every day routines in the home to build their child's language. By using the strategies and activities contained in these units during daily routines, parents are provided with a variety of resources as to how utilizing different mediums, such as book reading and hands on activities, can be used to provide language building opportunities for their children. As parents incorporate language building strategies into everyday routines in the home, children are consistently exposed to language in a meaningful context in which they are able to acquire language.

Creating these units involved thinking through the presentation of materials included in the units and activities in order to ensure parents could easily understand and implement the language building strategies described. Just as creating these units involved a great deal of trial and error, learning to incorporate language building strategies into everyday routines takes practice. Providing parents with multiple opportunities to use language building strategies will make incorporating strategies into everyday occurrences second nature for parents. Professionals working with parents of children who are deaf or hard of hearing can utilize tools, such as the units created for this project, as a parent coaching tool. It is important that professionals utilize

parents as a vital part of a child's early intervention program. The Dialogic Reading questions

and language building strategies incorporated in these units are effective strategies educators use

in the classroom which can be equally effective for parents to use at home. Professionals need to

partner with parents in order to help students acquire listening and spoken language skills.

Educators can utilize parents as they provide suggestions as to how parents can incorporate

language targeted in the classroom into daily routines at home. Every event can become a

meaningful language building experience when adults consciously think through ways they can

target language. For example, one of the extended activities included in the Mealtime unit

involved targeting prepositions while setting the table. Setting the table for a meal is a simple

task which can become a meaningful language opportunity as parents intentionally target

language by using language building strategies such as the ones provided in these units.

Providing parents with information and resources they can easily embed into routines already in

place at home will enable intervention strategies used in the classroom to continue into the

child's home environment making intervention more meaningful and effective.

References

Ambrose, S., Fey, M., & Eisenberg, L. (2012). Phonological awareness and print knowledge of preschool children with cochlear implants. *Journal of Speech, Language and …*, *55*(June). doi:10.1044/1092-4388(2011/11-0086)b

Ard, L., & Beverly, B. (2004). Preschool Word Learning During Joint Book Reading Effect of Adult Questions and Comments. *Communication Disorders Quarterly*, 17–28. Retrieved from http://cdq.sagepub.com/content/26/1/17.short

Beck, I. L., & McKeown, M. G. (2007a). Increasing Young Low   -Income Children's Vocabulary Repertoires through Rich and Focused Instruction. *The Elementary School Journal*, *107*(3), 251–271. doi:10.1086/511706

Beck, I. L., & McKeown, M. G. (2007b). Increasing Young Low   -Income Children's Vocabulary Repertoires through Rich and Focused Instruction. *The Elementary School Journal*, *107*(3), 251–271. doi:10.1086/511706

Blaiser, K. (2012). Supporting communicative development of infants and toddlers with hearing loss. *Seminars in speech and language*, *33*(4), 273–9. doi:10.1055/s-0032-1326911

Brown, R., Waring, R., & Donkaewbua, S. (2008). Incidental vocabulary acquisition from reading, reading-while-listening, and listening to stories. *Reading in a Foreign …*, *20*(2), 136–163. Retrieved from http://nflrc.hawaii.edu/Rfl/October2008/brown/brown.html

Chao, P.-C., Bryan, T., Burstein, K., & Ergul, C. (2006). Family-Centered Intervention for

    Young Children at-risk for Language and Behavior Problems. *Early Childhood Education*

    Journal, *34*(2), 147–153. doi:10.1007/s10643-005-0032-4

Derr, J. M., Wiley, S., & Choo, D. I. (2011). Impact of early intervention on expressive and

    receptive language development among young children with permanent hearing loss.

    American Annals of the Deaf , *155*(5), 580-591.

DesJardin, J. (2011). Maternal Involvement in the Home Literacy Environment: Supporting

    Literacy Skills in Children With Cochlear Implants. *Communication …*, *32*(3), 135–150.

    doi:10.1177/1525740109340916

DesJardin, J. L., Ambrose, S. E., & Eisenberg, L. S. (2009). Literacy skills in children with

    cochlear implants: the importance of early oral language and joint storybook reading.

    Journal of deaf studies and deaf education, *14*(1), 22–43. doi:10.1093/deafed/enn011

Ezell, H. K., Justice, L. M., & Parsons, D. (2000). Enhancing the Emergent Literacy Skills of

    Pre-Schoolers with Communication Disorders: A Pilot Investigation. *Child Language*

    Teaching and Therapy, *16*, 121–140. doi:10.1177/026565900001600202

Frede, E., Barnett, W. S., & Riley-ayers, S. (2006). *NIEER Early Literacy : Preschool Years* (pp.

    1–12). Retrieved from http://www.nieer.org/resources/policybriefs/10.pdf

Gascon-Ramos, M., Campbell, M., Bamford, J., & Young, A. (2010). Influences on parental

    evaluation of the content of early intervention following early identification of deafness: a

study about parents' preferences and satisfaction. *Child: Care, Health …*, *36*(6), 868–77. doi:10.1111/j.1365-2214.2010.01092.x

Geers, A. E. (2002). of Speech , Language , and Literacy in Children With Early Cochlear Implantation. *Language, Speech, and Hearing Services in Schools*, *33*(July), 172–184. doi:0161–1461/02/3303–0172

Holt, R.F., Beer, J., Kronenberger, W.G., Pisoni, D.B., & Lalonde, K. (2012). Cochlear Implant Users' Speech and Language Outcomes: Some Preliminary Findings, 55(June), 848-865. doi: 10.1044/1092/4388(2011/11-143)vocabulary

Joint Committee on Infant Hearing. (2007). 2007 position statement: Principles and guidelines for early hearing detection and intervention programs. *American Academy of Pediatrics*, *120*, 898-921. doi: 10.1542/peds.2007-2333

Kashinath, S., Woods, J., & Goldstein, H. (2006). Enhancing generalized teaching strategy use in daily routines by parents of children with autism. *Journal of Speech, Language, and Hearing Research*, *49*, 466-485. doi: 1092-4388/06/4903-0466

Justice, L., Meier, J., & Walpole, S. (2005). Learning new words from storybooks: An efficacy study with at-risk kindergartners. *Language, Speech, and Hearing Services in …*, *36*, 17–32. Retrieved from http://lshss.asha.org/cgi/content/abstract/36/1/17

Lederberg, A. R., Schick, B., & Spencer, P. E. (2013). Language and literacy development of

deaf and hard-of-hearing children: successes and challenges. *Developmental psychology*,

49(1), 15–30. doi:10.1037/a0029558

Lennox, S. (2013). Interactive Read-Alouds—An Avenue for Enhancing Children's Language

for Thinking and Understanding: A Review of Recent Research. *Early Childhood

Education Journal*, *41*(5), 381–389. doi:10.1007/s10643-013-0578-5

Marschark, M., Rhoten, C., & Fabich, M. (2007). Effects of cochlear implants on children's

reading and academic achievement. *Journal of deaf studies and deaf education*, *12*(3), 269–

82. doi:10.1093/deafed/enm013

McLeod, a. N., & McDade, H. L. (2010). Preschoolers' Incidental Learning of Novel Words

During Storybook Reading. *Communication Disorders Quarterly*, *32*(4), 256–266.

doi:10.1177/1525740109354777

Moeller, M. P. (2000). Early intervention and language development in children who are deaf or

hard of hearing. *Pediatrics* , *106*(3), doi: 10.1542/peds.106.3.e43

Moeller, M. P. (2011). Language Development: New Insights and Persistent Puzzles. *Seminars

in Hearing*, *32*(02), 172–181. doi:10.1055/s-0031-1277239

National Institute for Literacy, (2008). *Developing early literacy: A scientific synthesis of early

literacy development and implications for intervention*. Retrieved from National Institute

for Literacy at ED Pubs website: http://lincs.ed.gov/publications/pdf/NELPReport09.pdf

NRP. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (pp. 1–1–4–133). Retrieved from http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Teaching+Children+to+Read:+An+Evidence+Based+Assessment+of+the+Scientific+Research+Literature+on+Reading+and+its+Implications+for+Reading+Instruction#1

Sass-Lehrher, M. (2013). Chapter 16: Early interventon for children birth to three. In *The NCHAM Book: A Resource Guide for Early Hearing Detection and Intervention*Retrieved from http://infanthearing.org/ehdi ebook/2013_ebook/17Chapter16EarlyIntervention2013.pdf

Sierau, S., Brand, T., & Jungmann, T. (2012). Parental involvment in home visiting: Interpersonal predictors and correlates. *Infant Mental Health Journal*, *33*(5), 489-495. doi: 10.1002/imhj.21322

U.S. Department of Education, Institute of Education Sciences. (2011). *Research summary on dialogic reading* (National Center for Educa tion Evaluation and Regional Assistance). Retrieved from website: http://community.fpg.unc.edu/sites/community.fpg.unc.edu/files/resources/Handout/CONNECT-Handout-6-1.pdf

U.S. Department of Education , Institute of Education Sciences (2012). *Phonological awareness training* . Retrieved from website: http://ies.ed.gov/ncee/wwc/pdf/intervention_reports/wwc_pat_060512.pdf

Wauters, L., Van, W. H. J., Bon, Tellings, A., & Leeuwe, J. F. J. Van. (2006). In Search of

    Factors in Deaf and Hearing Children's Reading Comprehension. *American Annals of the*

    Deaf, *151*(3), 371–380. doi:10.1353/aad.2006.0041

White, K. R., Forsman, I., Eichwald, J., & Munoz, K. (2013). The foundations and evolution of

    ehdi. In *A Resource Guide for Early Hearing Detection and Intervention* Retrieved from

    http://infanthearing.org/ehdi-ebook/

Yoshinaga-Itano, C. (2003). From Screening to Early Identification and Intervention:

    Discovering Predictors to Successful Outcomes for Children With Significant Hearing Loss.

    Journal of deaf studies and deaf education, *8*(1), 11–30. doi:10.1093/deafed/8.1.11

Appendix A

Example of routine vocabulary list.

Bath Time Vocabulary

Nouns

Water	Tub	Pajamas
Mud	Head	Bedtime
Bath time	Shoulders	Story
Clothes	Ears	Stream
Bubble	Face	Towel
Tugboat	Hands	
Ducky	Feet	

Verbs

Play	Smell	Running water
Turn on	Dries	Splish-splash
Turn off	Drink	Dry

Adjectives

Dirty	Warm	Sudsy
Clean	Cool	Tired

Appendix B

Example of Dialogic Reading Questions definition list and specific questions included in the books of each unit.

Reading Questions

Using different types of questions while reading engages children and provides them with meaningful opportunities to learn new vocabulary and other language skills. Below are different types of questions we will use while reading the books in this unit:

Completion Prompt: This type of questions allows children to fill in the blank for the question you ask

e.g. "He is drinking from a _____" "He needs to clean his teeth. He should use a _____"

Recall Question: These questions help your child remember what has already happened in the story.

e.g. "What are they making?" "Where is he going?"

Open Ended: Open ended questions allow your child to problem solve and come up with their own solutions to the story.

e.g. "What do you think he should do to get ready for bed?" "What could he pretend to be at bath time?"

Wh-question: These questions begin with who, what, where, when, and why

e.g. "What is he scared of?" "Who do you think will read him his story?" "Why should she brush her teeth?"

Distancing: These questions help children connect what is happening in the story to things that they have experienced.

e.g. "What do you do to get ready for bed?" "That looks messy! Have you eaten a messy lunch before?"

Sample Questions to ask While Reading

These are examples of the questions you will find on the pages of each book in this unit. The questions are designed to help your child develop critical thinking skills as they talk about what is happening in the story and make connections to their own experiences. Don't worry if your child is having a hard time coming up with an answer to a question. Talk through it with them and give them a chance to think about each question.

Goodnight Little Monster

P.1 Recall: what's little monster getting ready for?

   Distancing: When can you see the moon?

P. 2 Distancing: What do you like to do during bath time?

P. 3 Completion Prompt: Little monster has _____ in his ears! Do you have bugs in your ears?

P. 4 Open Ended: How does little monster feel?

P. 5 Wh: What is little monster wearing?

P.6 Distancing: Little monster likes eating bugs before bedtime. What snacks do you like to eat before bed?

P. 7 Open Ended: He has his PJ"s on and brushed his teeth. What do you think he should do next?

P. 8 Recall: What is little monster almost ready to do?

P.9 Distancing: What do you like to snuggle with at bedtime?

P. 10 Recall: How did little monster feel?

   Open Ended: What do you think would help him to not feel scared?

P. 11 Wh: What is little monster doing?

The Things I Love About Bedtime

P.1 Wh: What does bunny do to get ready for bed?

P. 2 Distancing: Do you like to hug before bedtime?

P. 3 Distancing: What's your favorite story to read?

P. 4 Recall: What did bunny do during the day?

   Wh and Recall: What is he getting ready to do at night?

P. 5 Distancing: What do you like to dream about?

P. 6 Wh: What is bunny doing?

Extended Reading Activities

Cailou Bath Time

Cailou plays in the mud during this story. Use the picture of Cailou and erasable marker to get Cailou dirty. You can them help him get clean as you read the story by wiping the 'dirt' off.

The Bath Time Book

Alfie does not want to go to bed during this story. He decides to make bath time more fun by becoming a pirate, a knight, and more fun characters. Help put on Alfie's costumes as you read the story together.

Word Puzzles

A few examples of puzzles are included in the unit. Each puzzle focuses on different reading skills such as counting syllables, putting sounds together, and rhyming. You can make these puzzles at home by taking pictures of objects or drawing pictures with your child. Write the word you want to focus on under the picture and cut the picture in a way that splits the word or phrase based on the skill you want to work on.

Examples:

- Syllables: Cut the word to separate each syllable (e.g. TA   BLE, Pa   Ja   Mas)
- Rhyming: You can take two pictures of rhyming objects or think of a phrase that rhymes (e.g. Bed Head; Goodnight, Sleep tight)
- Blending sound: Cut a piece for each letter in the word (e.g. C A T, C U P)

Appendix C

Example of language building strategies definitions and extended activities embedding language building strategies included in each unit.

Strategies for Building Language

The strategies listed below are different things you can use when talking with your child that will help build their language. Each activity listed in this unit has an example of a way you can use one of these strategies.

Parallell Talk: This strategy is used as you talk about what your child is doing.

e.g. "You are eating the bananas" "You put the plates on the table" "Oh no! You dropped your spoon"

Self Talk: Talk about what you are doing. This gives your child a lot of language as they watch you and listen to you describe what you are doing.

e.g. "I found your tooth brush" "I need to put my pajamas on" "I'm eating a pear"

Modeling: Provide the child with a sentence or word you would like the child to say.

e.g. "Apples. We are eating apples. What are we eating? Apples"

Expansion: This strategy is used to build on the language your child has already given you. You provide them with more information than what they gave you.

e.g. child "spoon" parent "Scoop the soup with your spoon"

Child "my pajamas" "We need to put your pajamas on"

Recast: Repeat the sentence that the child just said with the addition of the correct word/morpheme /word order.

e.g. "Does your bear has a tie?" "Does your bear *have* a tie?"

Extended Mealtime Activities

Each activity includes a couple ideas for specific language targets you can work on during this activity. You can try both suggestions, one at a time, or think of a different language focus you want to try during the activity.

Make a meal together

Make a meal together. Talk about what you are doing as you go along. For example If you are making a peanut butter sandwich for lunch, talk about taking out the bread, spreading the peanut butter, and putting the two slices together.

   a) **Verbs:** Use acoustic highlighting to emphasize certain vocabulary words. Put extra emphasis on the verbs you say than you normally would. Talk about what you are doing as you *pour* a glass of juice, *stir* soup, or *mix* some ingredients together.
   b) **Following Directions:** This is a great activity for helping your child listen to and follow directions. As you are making your meal, give your child a specific task they can help with (e.g. "spread the peanut butter", "grab a cup and then pour some juice").

Set the table

Set the table together to prepare for a meal. Find the items you need together and place them on the table.

   a) **Naming Objects:** Use parallel talk to build on your child's language during this activity. Talk about objects you need to set the table as you look for them and set them on the table (e.g. "You found the plates", "We need forks. Forks are in the drawer").
   b) **Preposition Practice:** Talk about where each of the items need to go as you set the table. You can start with a single item that needs to be placed in the middle of the other objects such as a plate or bowl (e.g. " let's put the plate **on** the table"). You can then talk about where the other items will be placed (e.g. "we need to put the spoon next to the bowl" "your cup goes above the bowl"). You can carry this activity into the meal by talking about where to place your food on a plate (e.g. "let's put the sandwich in the middle of the plate" "My chips are going next to my sandwich").

I spy what food

This activity can occur during any meal during the day. Talk about the food you are eating together and the actions you are doing (e.g. scooping potatoes, eating a sandwhich, drinking juice).

   a) **Expanding Utterances:** Add more to what your child says as you eat together (e.g. child "cereal" parent "you're eating cereal", child "I want" parent "you want to use the spoon"). Your child will learn new language as they hear you add to what they say.
   b) **Adjectives:** Be descriptive as you talk about the food you are eating. Describe textures, colors, and tastes of different food items (e.g. "These crackers are salty", "I can hear your apple crunch", "this juice tastes sweet")

Packing My Bag

Pack a lunch bag together to begin this game. Place some items out that you can choose to pack (crackers, juice, fruit, bread, etc.) and talk about the items you can choose. One person is chosen to begin the game by saying, "I'm going to _____(name a place e.g. the park or the table) and in my bag I've packed a _____ (name 1 item e.g. apple, juice, crackers, etc.)". The next person says, "I've packed a" and must restate the first item and add

another. If it is hard to remember the items that have been packed provide your child with prompts such as "we packed an apple, crackers, and _____" allowing them time to try and remember what has been packed.

a) **Pronouns:** This activity is an easy way to use the pronouns **my** and **your** as you talk about whose turn it is. Before starting be sure to say "It's my turn first. Sara, next it will be your turn". Before the next person begins have them tell you whose turn it is (e.g. "Whose turn is it Sara?" Child "It's my turn, next it will be Kevin's turn").

Stacking the dishwasher

This a great activity to model language. Stack or empty the dishwasher together being sure to talk about the names of each of the items you are putting in or taking out (e.g. "I'm going to stack the cups on top" "we will put the plates on the bottom").

a) **Opposites:** Have dishes that vary in size, color, or other ways. Talk about the differences in the objects you are placing in the dishwasher ("let's put the tall cups on top and the short cups on bottom" "we need the small plates in front and the big plates in back" "Let's put the blue cups in first").

Experience book

A great way to get your child talking and to build their language is to put together a book about them and a fun activity you did together. Choose a meal during the day and take pictures of your child making the meal with you and eating. You can then put the pictures together in a simple way with a short sentence about the picture. Talk about the pictures together asking your child questions about what they did and comment on the different pictures (e.g. "Oh this looks messy. What did we make", "How did it taste?" "You did a great job pouring the juice").

a) **Paper:** An example of an experience book is included in this unit. You can use the experience book template to print and paste pictures directly on to the pages. You can also write your own captions to go along with the pictures.

b) **Digital:** There are several apps you can use with computers and phones that allow you to make a digital flip book. You can use one of these apps to add pictures and your own captions. A free download can be found at:
https://itunes.apple.com/us/app/create-photo-books-from-your/id548773050?mt=8