



Dear Learning to Talk Families and Friends,

We have reached the last lap of our study, Skills 4 Words, and we can't thank you enough for your help! It seems like just yesterday we were planning for your first visits with us and here we are beginning the last year of the study. It has been so wonderful to see your children "learn to talk" over the two years of this study. Time does fly when you are having fun and working hard!

In this issue we would like to share some of the findings that have already come out of your visits with us about how and when children develop something called "**Phonological Awareness**", an important skill for the development of reading skills. You may have read about PA in the news or heard it discussed at your child's school. "**Phonological**" refers to saying and understanding the sounds of a language. "**Awareness**" refers to the ability to break down a word into individual sounds ("**sun**" has 3 sounds: **s**, **uh**, and **n**), to know the order of sounds in a word, (**s** comes first, **uh** is in the middle, **n** is the final sound) and to understand that the meaning of a word changes if you change a sound in it (if we change the **s** to a **b** the word changes meaning, it becomes the word "**bun**").

When children notice these things about words, can talk about them, and "play" with words, such as when they rhyme, make up "silly" words, or "take words apart," we say they have "**Phonological Awareness**." This skill has been found to be a strong predictor of future reading success and an essential skill for phonics and spelling. This is why we so are interested in knowing more about how young children develop skills in this area. I am pleased to share these early results with you and thank you again. Your time and effort have made a difference in helping the field of Communication Sciences and Disorders learn more about how to help all children come to school ready to read!

Yours,
Jan Edwards, Principal Investigator

Learning to Talk
Lab- UW-Madison

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Special points of interest:

- What is phonological awareness?
- How can I help my child develop phonological awareness?
- Research findings that your child helped us uncover!

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"sun" vs. "bun"

Phonological Awareness

The important skill deep beneath the surface of “Learning to Read”

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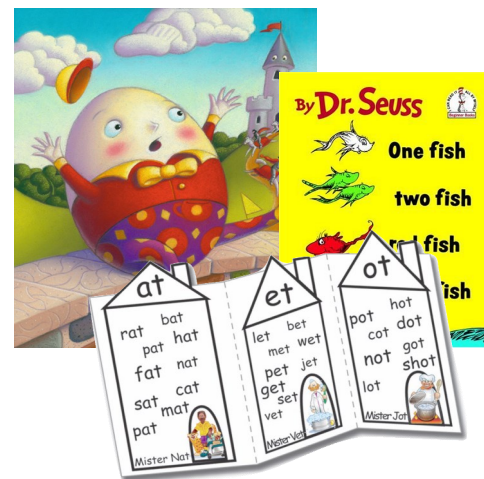
What is phonological awareness?

Most people feel that learning to read begins when children start to pair a **letter** they see in a word **written** on a page with the **sound** that letter “makes.” We call letters written on a page **text**, and we say a child is **sounding out a word** they see written by pairing the letter they see with the “sound it makes.”

While it is true that **sounding out** is an important skill that children develop as they learn to read, new research is showing us that to get to this **sounding out** skill, children are actually developing something much earlier, way before kindergarten, that is very important to later success in reading and writing. This important early skill that is crucial for later success in literacy is called **phonological awareness**.

Phonological awareness is the skill that enables children to recognize and flexibly “work with” sounds of their spoken language when they talk and listen. At the preschool level, this means knowing that words can rhyme, are made up of parts (syllables), noticing how many **syllables** are in a word, and noticing how sounds repeat themselves in words. In summary,

phonological awareness is being able to “play” with sound long before you can “read” or “sound out” words you see written. The best way to think about phonological awareness is to think about how young children enjoy nursery rhymes, music, finger plays, poems and books that repeat words and phrases in a “sing song” like way, long before they can “read.” Picture books that young children enjoy are filled with poems, rhymes, silly sounds and repeated phrases. Music is very important at this stage because that is exactly what a song is: a way to teach a young child about the **sound** of their language.



Rhyming is a great way to help your child develop phonological awareness!

As children grow, they use and understand more words. We say their **vocabulary** grows. We know now that their **phonological awareness** skills grow too. At first they **hear and recognize** rhyming, tone, and rhythm, and show us that they enjoy this by their delight in music and making funny sounds. Next, they begin to “play” with words and sounds themselves: they make up words that rhyme, break words down into the syllables and single sounds, often clapping along in rhythm to mark syllables. They show us that they are working on phonological awareness skills by having fun with sound. We know this is an important step in learning to read. At first they play with sound in “big chunks”

For instance, animal noises, car noises etc. Then they start to listen to, notice, understand, and work with **single sounds** in words **they say and hear**. This is when phonological awareness begins, which leads to the next step for reading readiness: pairing sounds with letters in words **they read and write**. Research has shown us that young children who have strong phonological awareness skills go on to develop the skills necessary for success in reading and writing, and this is why we are interested in this early skill at the Learning to Talk lab: because “learning to talk” seems to have an effect on “learning to read!”



How can I help my child develop phonological awareness?

Many times parents will ask: “*how do I teach my children these skills?*” The answer to this question is two-fold. Phonological awareness isn’t really taught at all. It’s a skill most children “pick up” (develop) by being exposed to rich language environments right from birth.

Each time you read a book to your child or repeat a nursery rhyme you are helping your child develop this skill. You are “teaching your child to read” much earlier than you probably realized. Right from birth children are working on the skills that will set the stage for success in reading.

This is why day care programs and pre-schools usually (and should be!) filled with rhyming songs, chants, and anything that encourages children to participate in word and movement games. We know that this is the “best practices” way to assure that children are developing the phonological awareness skills they will need for literacy success. Through these early “play with sound” interactions with important people in their lives, most children develop phonological awareness skills. So, to help your child develop these important skills:

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1. It is ***never too early*** to

- * talk,
- * read,
- * sing,
- * and play

with your children so that they hear lots of language from the important people in their lives.

Even though a baby/toddler/preschooler can't answer back yet in the same way an adult speaks, they are like sponges taking in the way people are communicating around them.

By listening, (and research shows us they do listen, ***very carefully***, way before they can speak, right from birth) they “set the stage” for the speaking they are going to do.

2. If a pre-school/caregiving program is right for you child it can be a very rich experience and support the development of phonological awareness skills. The pre-school/care giving program that is filled with

- * songs,
- * finger plays,
- * rhymes,
- * and rhythm

is following what research has shown are “best practices” for giving children the support in phonological awareness development they need to head for success in reading and writing.



What if I am concerned about my child's phonological awareness skills?

Phonological awareness is a ***developmental skill***, one of the skills your child will ***develop*** with each passing year. Just like crawling, then walking and other “milestones” parents watch for in the early years that appear in a certain order, phonological awareness will begin to develop. When we say a skill is ***developmental*** we mean that it is a skill that is not just “taught”: it ***grows*** as a child gets

older, and it follows a timeline of steps that is in the about same order for most children.

We become concerned if there doesn't seem to be any ***progress in*** a developmental skill. As long as a child is moving forward on the path toward a “developmental milestone” and not “stalling” when they are developing a skill, there is room for differ-



ences that are not of concern. This is because a developmental skill is **acquired** by a child: when a child is ready, AND.....

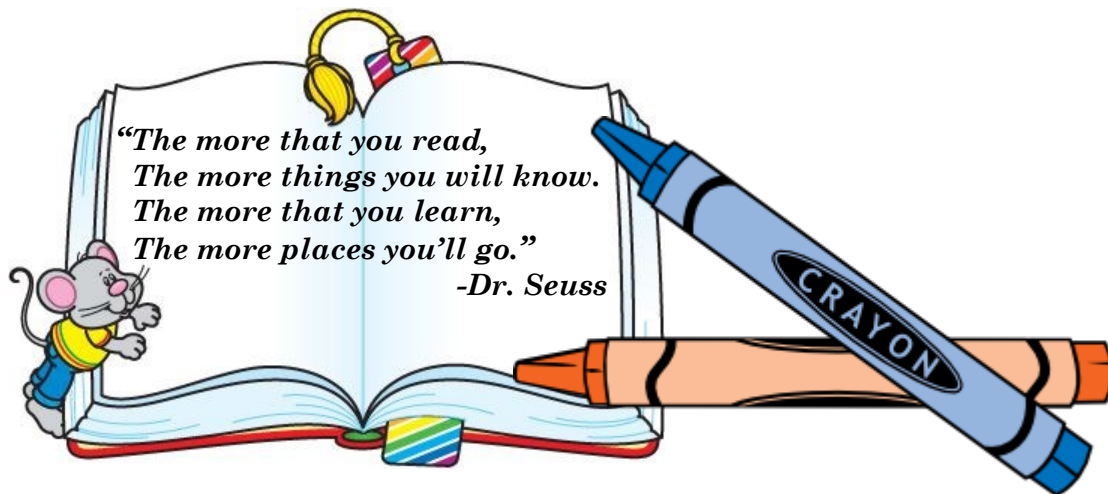
.....when a child has an environment that gives him/her what is needed for that skill to grow.

This means that a developmental skill is different than something we “teach” such as “all the names of the states of the U.S.A and their capitals.” Not all children do exactly the same thing at the same time when something is a **developmental** skill, but we do see that they do the steps in usually the same order.

If you notice that your child is struggling with phonological awareness and you are concerned, have a conversation with your child’s pediatrician, teacher, and/or care giver

and ask them what they see in this area of your child’s development. They will know how your child is doing because they see many other children this age. They will know the next steps you should take and help you decide who would be a part of those next steps if there is a concern.

Now you know why at Learning to Talk we are interested in phonological awareness. By participating in our study you are helping us know more about this amazing process of learning to talk, and how it has an effect, much earlier than anyone thought, on the reading and writing skills children need for success in school later. It turns out children are learning to read from Day 1!



Breaking News!

Phonological Awareness Study Results

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In this month's Learning To Talk Newsletter we are highlighting phonological awareness, a skill that research has shown to be important for learning to read. The previous article in our Newsletter describes what we mean by "phonological awareness" and now we would like to share with you some of our recent findings on this topic.

When your children visited the lab they participated in a series of tasks that helped us learn more about how and when young children gain phonological awareness skills, even before they actually "read."

We measured:



The CTOPP-2 and EVT-2 are examples of standardized language assessments that we use in the L2T Lab!

1

(*What and how many words your child SAYS*) using the Expressive **Vocabulary Test-2 (EVT-2)**. Children saw pictures in a picture book easel and we asked them to name the picture. The pictures started out easy and kept getting harder and harder. We wanted to see how far up your child would go, keep guessing and trying to name even very hard **vocabulary** items. We give this test because we are wondering whether or not a child's **vocabulary** seems to be connected to phonological awareness skills and if so, how?

2

(*How many SILLY words your child SAYS*) using the **Non-Word Repetition Task**. Children were asked to "copy the computer" and say "silly" words (non-words). This is an assessment of a child's **memory capacity** for sounds. When children copy a word that is not real, they have to rely on their **memory** for "what they just heard" rather than use knowledge about real words, words they already know. From this task we have a measure of a child's ability to use memory quickly to "learn and repeat" a new word. We are wondering whether or not a child's **memory abilities for sound sequence** are tied to phonological awareness skills, and if so, how?

3 (How sensitive to small sound differences in words your child is) using the *Minimal Pairs Task*. Here your child was shown two pictures with names that differed by only one sound (for example: man/moon) and asked to touch the one the computer said. We are wondering whether or not a child's ability to hear these small differences seems to be tied to phonological awareness skills, and if so, how?

make the word "MOP"), called **BLENDING**, and whether or not your child was ready to **remove sounds** from a word to create a new word (for example, *blanket* without *et*, makes *blank*), called **ELISION**. These are the end-goal Phonological Awareness skills that children have when they approach school-age. We are wondering when children seem to be able to do these tasks.

"...concentrate on providing a rich language environment filled with words, words, words and more words..."

4 Finally we gave your child 2 parts of a test used to look at his or her newly emerging phonological awareness skills called the *Comprehensive Test of Phonological Processes* (CTOPP-2). The two parts look at if your child is ready to blend individual sounds together to create a new word (for example, the sounds "mmm" and "ah" and "puh", when put together

Our end goal is to understand how these skills work together to help children develop phonological awareness. Previous researchers in this area have come up with different answers to this question.

When researchers say they believe in the **lexical restructuring hypothesis**, they are saying that they believe that although **memory capacity** for sound sequences and the **ability to detect small differences** in sounds are important skills that lead to phonological awareness, they are not as strong as having a **large vocabulary**. To these researchers, a large vocabulary is the best indicator that a child will have good phonological awareness skills.



So, to put the lexical restructuring hypothesis to the test, your child participated in the series of tasks we described above. The first results are now coming in!

Our results **partially support** the lexical restructuring hypothesis. To better understand what we mean by "**partially support**" it is important to remember that we

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measured phonological awareness by using two different parts of the CTOPP-2 test: one part looked at a child's ability to **blend sounds together** (called, **BLENDING**) and the other part looked at a child's ability to **remove sounds from words to construct a different word**, (called **ELISION**) When we looked at the results, it seems that **Elision**, is more difficult than **Blending**. It seems children can **succeed on blending** tasks by relying on their **vocabulary** knowledge, but to do the Elision (removing sounds) task, a child's **memory capacity for sound** seems to be just as important as having a large vocabulary.



From these first results we can offer our first conclusions to help speech-language pathologists, teachers and parents support a child's development of the phonological awareness skills that will help children with literacy success. **Vocabulary knowledge** appears to be crucial for the development of the different skills that make up what we call phonological awareness.

What we are seeing at first pass is that if parents, teachers, and speech-language pathologists want to put energy, time, and resources into helping children develop phonological awareness skills for success in early school literacy, they should concentrate on providing a rich language environment filled with words, words, words and more words, spoken and heard by the important people in a child's life, and tied to teaching a child what these words mean, where to find them, and how and when to use them. So if a child is having trouble with phonological awareness skills, working on increasing a child's spoken vocabulary seems to be a key way to help.

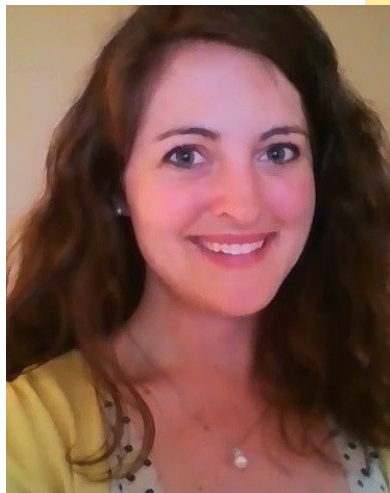


As you can see you and your child are an important part of our research team here at UW. Thanks to you, we can say more about phonological awareness and this amazing process of Learning To Talk!

Team Members of the Hour

Megan Flood

Speech-Language Pathologist
UW-Madison Department of Communication Sciences and Disorders



Megan Flood attended the University of Wisconsin – Madison for undergraduate and graduate school. She received her Bachelor of Arts degree in Communication Sciences & Disorders and Teaching English as a Second Language in 2013, and in 2015 received her Master of Science degree in Speech-Language Pathology. Megan worked for the Learning To Talk Lab as an undergraduate and a graduate student. You may remember meeting her when you came for one of your study visits. She did many jobs for the lab including running visits, developing study tasks, training new team members and result analysis, but her biggest job for us was setting up and monitoring the Language Environmental Analysis (LENA) portion of the study. From the logistics of getting the LENA devices home to you and in the right vest or t-shirt, to the analysis and issuing of the reports, Megan was our knowledgeable LENA lady! During graduate school, Megan completed a thesis on "Quality versus quantity: An investigation of the impact of home language and maternal education level on young children's vocabulary size." She is currently completing her Clinical Fellowship Year as a pediatric Speech-Language Pathologist in the Kettle Moraine School District.

Kayla Kristensen

Speech-Language Pathologist
UW-Madison Department of Communication Sciences and Disorders

Kayla Kristensen graduated from the University of Wisconsin-Madison with her B.A. in Psychology and Communication Sciences and Disorders in Spring 2013 and a Master's degree in Speech-Language Pathology in Spring 2015. Kayla completed a Master's thesis entitled "Relating decreased acoustic contrast to decreased speech intelligibility: Perceptual consequences for children with cochlear implants." You may have met Kayla when you came for your visits to Learning to Talk. Her many jobs for the lab included running visits, developing new tasks, data analysis, data management, and training new team members. Kayla's biggest job for us was as our team leader for recruitment, task development, assessment, and examiner training for children with Cochlear Implants and their families. Kayla is currently completing her Clinical Fellowship in Speech-Language Pathology at the Waisman Center within the Newborn Follow-up Clinic, Down Syndrome Clinic, Feeding Clinic, and Neuromotor Development Clinic. Her research interests include identifying intervention strategies to support communicative competence for persons with complex communication needs.



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**If you have already participated in our study,
thank you!**

**If you are new to Learning to Talk,
we'd like you to participate!**



Interested in helping us improve methods for teaching young children?

Join our research project! Our study looks at how young children learn sounds and words! Both you and your child can be involved!

Who can participate?

- Children who are 2-5 years old
- Children who are native English speakers
- Children who have normal hearing and are typically developing or have cochlear implants!

Families are paid for their participation and your child will receive a small toy and a book. Transportation (cab) will be provided if you would like it.

How do our studies work?

Sessions take place at the University of Wisconsin-Madison's Waisman Center, 1500 Highland Ave, Madison, WI.

Your child will participate in 1-3 sessions and the sessions last about 1-2 hours.

If you would like to learn more about our studies, please email us at learningtotalk@csd.wisc.edu,

or call us at the Learning to Talk lab at 608-263-0729

or visit our website,
www.learningtotalk.org
and enter your information on our **Participate** page!

We look forward to working with you!

Please pass this information on to family and friends who might be interested in this study.

Thanks!

