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Alphabet Knowledge and Phonological Awareness

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Summary

Alphabet knowledge and phonological awareness (PA) are by no means the only things that preschoolers need to learn in order to be ready to succeed in literacy during kindergarten and beyond. But, knowing the letters of the alphabet and being able to hear and manipulate the sounds that make up oral language (phonological awareness) are the two early literacy skills that most highly correlate with school literacy achievement during the primary grades (National Early Literacy Panel [NELP], 2008; National Reading Panel, 2000). The teaching of these foundational skills in an early childhood program has been a controversial topic during the recent past. This white paper explains *why* phonological awareness and alphabet knowledge are so important, *what* children need to learn about PA and letters, and *how* prekindergarten teachers can foster learning in these areas.

Why Do Alphabet Knowledge and Phonological Awareness Matter in Prekindergarten?

Children's reading and writing abilities develop over a long period of time and involve learning a wide range of skills, strategies, and knowledge. Alphabet knowledge and phonological awareness play the most important roles in this development during early childhood, especially from ages four through six. Research indicates that:

- The development of phonological awareness is an essential part of learning to read; it provides the foundation for the phonics skills necessary for becoming a capable reader during the primary grades (Lonigan, Burgess, and Anthony, 2000).
- Alphabet knowledge is also extremely helpful in enabling phonemic segmentation and understanding the sound-symbol relationships in an alphabetic written language like English or Spanish (Hammill, 2004; Hohn and Ehri, 1983; Storch and Whitehurst, 2002).
- Alphabet knowledge and phonological awareness work together to enable sight word reading (Ehri, 2005).
- Preschoolers are quite capable of learning about the alphabet and developing their phonological awareness skill during prekindergarten (Justice, et al., 2006; Lundberg, Frost, and Petersen, 1988).
- Children who develop phonological awareness and alphabet knowledge as preschoolers are much less likely to experience reading difficulties later on (Snow, Burns, and Griffin, 1998).

In summary, if children have a rich foundation in alphabet knowledge and phonological awareness from their prekindergarten experience, they will likely have success in learning to read and write during their primary grade years.

What Are We Working to Develop in Alphabet Knowledge and Phonological Awareness?



Alphabet Knowledge

Alphabet knowledge involves understanding the names of the letters of the alphabet. But this understanding is much more than simply being able to recite the alphabet or sing the alphabet song. The alphabet knowledge important for prekindergarten children to develop involves:

- **Letter identification:** When shown a letter or an array of letters, the child provides the correct name of that letter. Letter identification should start with clear, primary grade “manuscript” font in prekindergarten, but ultimately children should become comfortable with letters in different fonts, as well as with handwritten letters.
- **Letter discrimination:** Although children cannot talk about it explicitly, their alphabet knowledge develops to the point where it involves an understanding of what features make one letter distinctive, that is, different from the other letters of the alphabet (e.g., what features of *b* make it different from *d*).
- **Fluency:** Ultimately, it is important for the child to be able to recognize or identify the letters of the alphabet fluently, that is, without much hesitation (Adams, 1990).
- **Writing:** Handwriting is not an instructional priority for prekindergarten, but encouraging children to form the letters of the alphabet (and not merely to identify them) helps deepen letter knowledge.
- **Letter sounds:** For purposes of learning to read, letter names are just a beginning (Ehri and Roberts, 2006); a knowledge of letter sounds is indispensable to developing the alphabetic principle (Adams, 1990). However, because of cultural practices in the U.S., the names of most letters are typically learned before children begin to understand letter sounds (Ehri, 2005).

Prekindergarten Standards for Alphabet Knowledge. How many letters of the alphabet should prekindergarten children know when they move into kindergarten? Research has not established any set number of letters, but the assessment information collected from thousands of prekindergartners in Virginia suggests that, if children know at least 12 uppercase letters and at least 9 lowercase letters at the end of prekindergarten, they will not be considered at risk in these areas for kindergarten (http://pals.virginia.edu/pdfs/rd/tech/PreK_technical_chapter.pdf). Of course, our instructional goals always strive to go beyond the minimum: knowledge of 12-21 uppercase letters and 9-17 lowercase letters at the end of prekindergarten is desirable.

Sequence of Alphabet Learning. A critical teaching question is, “In what order should letters be taught?” Research indicates that:

- Although young children typically learn certain letters earlier than other letters (e.g., B, X, O, and A are the most readily learned), there is no one sequence for teaching the alphabet that has proven most advantageous (Justice, et al., 2006). The order in which different children learn the letters of the alphabet is highly variable.
- Children have a tendency to learn earliest the letters contained in their own names (especially the initial letter of the first name) (Justice, et al., 2006).
- Features intrinsic to particular letters (their shapes, amount of phonological information in the letter name, etc.) also affect how readily and quickly those letters are learned (Treiman, 2006).

Phonological Awareness

Phonological awareness is the ability to hear the “parts” of oral language. Oral language consists of increasingly smaller parts, and phonological awareness involves being able to hear, think about, and “manipulate” all the following parts:

- Sentences
- Words
- Syllables
- Onset + Rime:
Onset = initial consonant or consonant cluster
Rime = vowel and any accompanying consonants

Examples:

Word	Onset	Rime
tap	t	æp
ship	ʃ	ɪp
lamp	l	æmp
thing	θ	ɪŋ

- Phonemes: the individual sounds that make up a word

Examples:

Word	Number of Phonemes	Phonemes
tap	3	t æ p
ship	3	ʃ ɪ p
lamp	4	l æ m p
thing	3	θ ɪ ŋ
plate	4	p l eɪ t

The ultimate goal of phonological awareness instruction is for children to be able to hear the individual sounds (phonemes) that make up words because reading an alphabetic language involves understanding the relationships between those individual sounds and the letters of the written language.

Aspects of PA Learning. As children learn to listen for and manipulate the various pieces of language, they typically develop understandings in the following aspects related to the sounds of language:

- *Attending to increasingly smaller units of sound:* It is easier for children to count or say the syllables of a word than to divide a word into its onset and rime; and the most difficult task is to identify the individual phonemes that make up a word. Thus, there is a developmental trajectory to PA learning that should be taken into account in instruction.
- *First, middle, and last:* The first part of a word is typically the easiest for children to hear/isolate; the last part of a word is the next easiest; and the middle part is the most difficult.
- *Blending and segmenting:* Blending involves putting together sounds. The sounds could be syllables or onset/rime or individual phonemes. Blending is an important PA skill for children to learn. Segmenting means breaking a complete word into parts (either onset + rime or each of the individual phonemes that make up the word). Segmenting is typically harder for children than blending. Children who can fluently blend and segment phonemes are well on their way to developing effective early reading skills.

How Do We Develop Alphabet Knowledge and Phonological Awareness?



Focusing on skills such as alphabet knowledge and awareness in prekindergarten has been controversial among early childhood educators. Some contend that instruction on letters and sounds should not be part of the prekindergarten curriculum. However, our experience in hundreds of classrooms, as well as results from research, indicates that young children enjoy and profit from learning about letters and the sounds of language and that teaching about these things—both informally and formally—can be done in developmentally appropriate ways.

Principles

Instructional Group Size. One of the things to remember about instruction in these skills is that, while whole-group instruction helps children learn about letters and phonological awareness, small-group and individualized instruction is even more effective (Connor, et al., 2006) and therefore should be a central part of the prekindergarten day.

Informal and Formal Instruction. In addition, the issue of children’s letter/PA learning informally and in more formal, deliberate lessons is important to consider. Children learn about letters and develop PA incidentally as a result of many different interactions throughout the day; therefore, it is important to maintain a print-rich and language-rich classroom environment (NELP, 2008). However, intentional instruction (especially in small groups and individually, and based on data about what each child has/has not learned) is crucial for ensuring that children make adequate progress in these important areas during prekindergarten (Phillips, et al., 2008; What Works Clearinghouse, 2007).

Time and Letter/PA Instruction. Prekindergarten children can learn what they need to learn about phonological awareness and the alphabet with a few minutes of high-quality lessons each day (NELP, 2008; What Works Clearinghouse, 2007). In addition, children can get considerable extra practice related to letters and phonological awareness by incorporating informal learning activities into what may otherwise end up being “dead” time: classroom transitions, bathroom breaks, and even outdoor play.

Experiences that Promote Alphabet Learning

Emphasis on Conceptual, Not Rote, Learning. At first glance it could appear that alphabet learning is simply a case of memorizing letter names. But for young children to develop deep knowledge and fluency with letters, it is important that the task be recognized as concept development. Therefore, children need to have many opportunities to compare and contrast the features of letters—features related to both the look of letters and the sounds of letter names. This means that it is critical to teach groups of letters rather than one letter at a time, so that children can see and hear the differences and similarities in teacher-led lessons and explore those features independently in follow-up activities.

Informal Learning Opportunities. The teacher structures the classroom so that children have many opportunities to interact with and learn about letters throughout the school day in different contexts and for different purposes. Key is that these letters have some purpose in children’s ongoing classroom activities—they label objects that children are using for an activity or give directions.

- **Print-Rich Classroom Environment:** Children see the alphabet being used throughout the room. Here are just a few possibilities—children’s names on cubbies and sign-in sheets; print props in the dramatic play area like menus, airline tickets, appointment books, food products, etc., depending on the play theme; alphabet cards; board games that have letter themes; alphabet books in the classroom library; and labels on bins/boxes so children know where to put back blocks or toys.
- **Read-Alouds:** Draw children’s attention to individual letters when reading alphabet books or simple concept books—or even stories in which letters play a crucial role, such as Soyung Pak’s *Dear Juno*.
- **Personal Names:** Since, for many children, their own names facilitate letter recognition, use name cards in a variety of ways (job charts, labeled cubbies, graphs and charts, etc.) and encourage children to write their names (label their work, sign in/out for the day, etc.)
- **A Word Play Environment:** Use rhyming, songs, and word play with children any time the opportunity presents itself. Encourage children to sing songs, recite familiar poems that have been placed on charts in various areas of the room, and “notice” words that sound the same at the beginning or end.



Formal Learning Opportunities

- The idea of having formal alphabet lessons in prekindergarten may bring to mind a scenario of “skill and drill” lessons or extended periods of time in which children sit at tables and fill out worksheets. But the “Learn About Letters and Sounds” activities that we have designed for each day are anything but that. We have provided varied and engaging ways for children to systematically study what letters are, what features to pay attention to in identifying them, and how they “work” to create the fascinating writing system that captures oral language.

Experiences that Promote Phonological Awareness

PA Developmental Trajectory. As mentioned above, the typical developmental progression for PA learning proceeds from larger to successively smaller units of sound. It is also the case that at any time during the school year, a prekindergarten classroom will have children at virtually all points along the trajectory. Such a situation implies two important instructional guidelines:

- *Instruction for All Points on the Continuum.* Provide opportunities to learn about all aspects of phonological awareness, from word and syllable understanding through work on isolating and manipulating phonemes.
- *Assessment-Informed PA Instruction:* Since children in a given classroom are at different points on the PA learning trajectory and therefore have different instructional needs, considerate PA assessment and small-group/individualized teaching are needed.

Informal Learning Opportunities

- *A Word Play Environment:* Use rhyming, songs, and word play with children any time the opportunity presents itself. Encourage children to sing songs, recite familiar poems that have been placed on charts in various areas of the room, and “notice” words that sound the same at the beginning or end.
- *Read-Alouds:* There are many books that feature rhyming language or alliteration that are fun for children to hear and give them valuable PA practice at the same time. A list of recommended titles can be found at: <http://www.uic.edu/educlerf/greatbooks.html>.

Formal Learning Opportunities

- There are a wide variety of game-like, teacher-led lessons that develop children’s phonological awareness. Such lessons can involve all aspects of the PA continuum—from tapping out syllables; to helping a puppet who “talks funny” blend onset and rime items or individual phonemes; to rhyming activities; to having children segment words into component phonemes in order to solve a “sound mystery.”
- Children who experience difficulty participating in the kinds of activities just described may need to have sounds or even syllables represented more concretely in instruction. In these cases, markers, chips, or boxes (Elkonin) may be necessary to scaffold children’s learning (Castiglioni-Spalten and Ehri, 2003).

The DLM Early Childhood Express®



In *The DLM Early Childhood Express*®, letter knowledge and phonological awareness are central instructional priorities. Both letter learning and PA development are addressed every day:

- Systematically targeting **every letter of the alphabet** for instruction and review over the course of the school year
- Ensuring that **all points on the developmental continuum of phonological awareness** are addressed through specific lessons, as well as in suggestions for children’s informal learning experiences
- **Linking instruction in alphabet knowledge to instruction in phonological awareness** so that children experience maximum learning opportunities in these foundational skills

Each day there are specific “Learn About Letters and Sounds” and “Phonological Awareness” lessons. In addition, we have designed the program so that, outside these two specific instructional times, there are suggestions for centers, transitions, and the materials in the room environment that provide the children with additional practice and opportunities to extend their learning.

The DLM Early Childhood Express® foregrounds research-supported strategies, as presented earlier in this white paper, for promoting alphabet learning and phonological awareness development. For example, in teaching the alphabet, children are presented with a specific group of letters (usually four) to be studied in each unit, and all four of those letters are taught each week (rather than a single letter for the week) in a range of instructional activities. This approach provides richer opportunities for children to compare, contrast, and thereby learn the distinctive features of the letters and to develop deep knowledge of them, thus promoting fluent letter knowledge. In addition, as indicated by the NELP findings, phonological awareness instruction is directly connected with the teaching of the alphabet, which has proven more effective than either an approach that stresses phonological awareness or one centered on the alphabet alone.

Most importantly, we are building on young children’s fundamental interest in the written language that is so important in the world around them. The conceptual, as opposed to memorization, approach to these foundational areas in *The DLM Early Childhood Express*® involves children in the exciting process of solving the written language puzzle that is so intriguing to them as prekindergartners on the verge of learning to read and write. We recognize that alphabet knowledge and phonological awareness are central to continued success in reading and writing during the primary grade years and, as such, have taken the position that prekindergartners’ learning in these areas must be as rich as possible and cannot be left to chance.



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