



From Crib to Classroom: Developing Language and Skills for Reading

Based on a presentation by Dr. Kathy, Hirsh-Pasek, Temple University Lefkowitz Professor of Psychology and Director, Infant Language Laboratory

Introduction

Today, we have a great deal of scientific evidence on the language and literacy development of infants. Much of it reinforces our intuition to engage children through relationships and to impart knowledge through intense interaction. Yet, the evidence also strongly suggests that there is much more we can do as parents and teachers to build stronger language and literacy skills in young children.

There is a science to early language and literacy development. We can better prepare children for later school achievement by taking what we know and making it an intentional and integral part of early childhood education—particularly among at-risk children and families.

Parents and close caregivers are the main teachers of these critical early skills, yet not every one of them has the time, resources or ability to tackle the job. Providing parents and close caregivers with the lessons learned from science will help equalize the language and literacy skills of children when they enter school—and go a long way toward preventing the achievement gap.

Lesson 1: Learning starts with engagement in relationships and interests.

Early language development is dependent on the quality of social interactions a child has with the important adults in his or her life. Language and literacy acquisition is advanced through caring and attentive relationships *between* children and adults. These foster episodes of “joint attention,” social situations in which caregivers and infants share the same focus and interest on a topic. Science has shown that children whose parents engage in more episodes of joint attention in infancy have more advanced vocabularies at age 2.

Joint attention is not a one-way street. Adults can and do engage young children in joint attention. For example, 12-month-olds can follow an adult’s eye gaze to one of several targets to establish joint attention. However, adults often fail to appreciate the fact that infants can and should engage them to establish joint attention on a target that interests the child.



Child initiated joint episodes are often more important to development than those initiated by adults. Babies attach labels to objects that interest them and not to things that they don't find interesting. If you talk about what the baby is looking at and examining, the baby is more likely to learn a word than if you try to change the child's focus of attention.

Lesson 2: Talk with infants, but let them drive the conversation.

Infants and toddlers build their language and learning through interactive, responsive and meaningful environments. The amount of language babies hear alone will not breed language learning or later literacy. What counts is responsive language where caregivers are:

- Talking *with* not talking *at*
- Expanding on what the child says and does
- Noticing what the child finds interesting and commenting

Adults who take turns in interactions with young children, share periods of joint focus, and express positive emotion provide children with the foundation needed to facilitate their language and mental growth. Stimulating and responsive parenting in early childhood are considered the strongest predictors of children's later language, cognitive and social skills.

Infants learn rich vocabulary through playful exchanges. In fact, they learn richer vocabulary in playful learning with meaningful information than they do in direct instruction methods devoid of meaningful engagement. This has been found in studies on shape learning with 4-year-olds and in spatial language through block play with 4-year-olds.

This is why young children—especially under 3 years—learn little or no language from television. Television is neither interactive nor caring communication—but rather a one-way street. The bottom line: Don't lecture. Infant instruction is fun play that collects meaningful cognitive and emotional information.

Lesson 3: Frequency Matters—infants and toddlers learn the language they hear the most.

Language learning depends on the amount of language that young children hear—starting in infancy. Like little statisticians, infants and toddlers calculate how the sounds flow together to make words and the types of words that are nested into longer sentences.

The amount of language that they hear in conversation also primes their language learning machine so that they become more efficient learners. This is true whether a baby is learning English or Spanish.



The literacy they gain in one language does not translate into literacy in another, but bilingualism does foster stronger skills.

These findings begin to explain why Hart & Risley found that children from disadvantaged backgrounds who heard significantly less language input as young children were far behind their peers who heard more language in their environments.

Lesson 4: Infants need to hear diverse examples of words and grammar.

The amount and diversity of the words and grammar that children hear fosters early and rich language outcomes. Children's vocabulary performance in kindergarten and later in second grade related more to the diversity of the talk they heard rather than just to the amount of talk they heard.

Frequency, variety and action are clear guideposts. Learning words—especially action words like verbs—helps children learn grammar, and learning grammar helps children learn words.

Diversity in language and grammar produces results. When fathers used a more diverse vocabulary in interactions with their infants at 6 months of age, their children developed more advanced communication skills at 15 months, accounting for 7% of the variance.

Lesson 5: Bilingualism is the norm and should be encouraged.

We are used to thinking that bilingual children should be or would be delayed—but the evidence suggests otherwise. Half of the children in the world are raised in bilingual environments—and they may have a significant advantage over children who are raised in single language homes.

Bilingualism seems to confer enormous advantages on children from better attention and problem solving skills to more flexibility in their thinking. Further, earlier exposure to two languages seems to confer more advantages than a more sequenced approach. Mixing two languages does not confuse language development, because the connection to words is language-specific. For example, the words we learn in English relate to the complexity of our talk in English while the words we learn in Spanish predict our Spanish communication.

Researchers have found strong neurological evidence to support the argument that hearing two languages as an infant promotes better language and pre-literacy skills. It has also been found that hearing two languages can promote stronger phonological skills.

We should embrace, not discourage, bilingualism in early childhood development. If we provide strong language input in two languages, our children will learn and thrive.