## A Communication Foundation: Building Blocks for Lifelong Literacy

Kathy Hirsh-Pasek, Ph.D.<br>Temple University<br>Brookings Institution<br>khirshpa@temple.edu

## 6 Principles of Language Learning:

1. Children learn what they hear most.
-Amount matters (Hart \& Risley, 1995)
-Amount of speech is important for statistical learning (Saffran et al., 1996)
-Amount of speech is important for speed of processing (Fernald, 2009; Weisleder \& Fernald, 2013)

2. Children learn words for things and events that interest them.
-L. Bloom's Principle of Relevance
-Babies attach labels to interesting not boring objects (Pruden, Hirsh-Pasek, Golinkoff \& Hennon, 2006)
-Evidence from babies and toddlers in joint attention (Akhtar, Dunham \& Dunham (1991); Tomasello \& Farrar (1986))
3. Interactive and responsive environments build language learning.
-Talking with not talking at
-Expanding on what the child says and does
-Noticing what the child finds interesting and commenting
-Using a label that goes with what you are looking at
-Asking questions rather than just making demands
-See Tamis LeMonda et al. (2014)

4. Children learn best in meaningful contexts.
-Studies on shape learning with 4-year-olds (Fisher, Hirsh-Pasek, Newcombe \& Golinkoff, 2013)
-Spatial language through block play with 4-year-olds (Ferrara, Hirsh-Pasek, Newcombe, Golinkoff, \& Lam, 2011)

## 5. Children needs to hear diverse examples of words and language structures.

-Amount and diversity of verbal stimulation (and gesturegesture/gesture word combinations) fosters early and rich language outcomes (Beebe, Jaffee \& Lachman (1992); Snow (1986); Tamis-LeMonda \& Song (2012); Rowe (2012); Goldin-Meadow et al. (2014))
-Children's vocabulary performance in kindergarten and later in second grade related to occurrence of
 sophisticated lexical items at age 5, predicted 50\% of the variance in children's second grade vocabulary (Weizman \& Snow (2000); Huttenlocher et al. (2002))

## 6. Vocabulary and grammatical development are reciprocal processes.

-Words and grammar are "developing in synchrony across the first few years of life" (Conboy \& Thal, 2006; p.209)
-In a bilingual sample, the amount of English words predicts English grammar and amount of Spanish words predicts the onset of Spanish grammar (Conboy \& Thal, 2006)
-There is a reciprocal relationship between words and grammar: sometimes grammar allows children to learn words (Naigles, 1990; Gillette, Gleitman, Gleitman \& Lederer, 1999; Imai, Li, Haryu, Hirsh-Pasek, Golinkoff, \& Shigematsu, 2008; Fisher \& Song, 2006)


The bottom line?

If we build a strong foundation in language, by using the 6 principles in our classrooms, our homes, and in our communities, we can 1). Reduce the 30-million word gap, 2.) Help children be ready to read by age 5,3 ). Increase the quality of the nation's preschools, and 4). We can measure our progress!

Follow us on twitter @KathyandRo1

