The Power of Language: Nourishing Development of the Whole Child
Ohio Striving Readers Literacy Academy 2019

DAVID K. DICKINSON
DAVID.DICKINSON@VANDERBILT.EDU
VANDERBILT UNIVERSITY’S
PEABODY COLLEGE OF EDUCATION

David.Dickinson@Vanderbilt.Edu

This presentation is only for use related to the Ohio Literacy Academy, 2019. The images are not to be used for any other purposes.
What does the future Hold?
The seeds of these future outcomes are sewn in infancy. Language plays a central role in all of them. Parents and early childhood teachers play a critical role.
Reading Success

Self-regulation

Academic Success

Friends

Responsive conversations

Skillful Teaching

Book Reading

Language-Rich Conversations
Attachment

- A secure relationship reduces anxiety and enables the child to explore the world.
- Anxiety shuts down exploratory activities.
- Children who lack a secure attachment:
  - Engage in little exploration
  - Show minimal emotional response to their mother upon her return in the strange situation
  - May have ambivalent response to mother upon her return
  - May avoid or be resistant to the mother
Lasting Effect’s of Secure Attachment

- A history of warm, predictable, responsive and sensitive interactions.
- Tanya with 18 month old Eliza.
  - Watch, discuss briefly how Tanya is demonstrating behaviors that foster strong attachment relationships with those near you.
- Hundreds of studies, summarized in meta-analyses, make clear that secure early attachment has long-term effects:
  - Less likely to be depressed, fearful and withdrawn (Groh et al., 2012)
  - More likely to have good relationships with peers:
    - In the childhood years (Groh et al., 2014)
    - At age 22 (Groh et al., 2012)
Language development is related to attachment. Securely attached children at 15 months have stronger language at 36 months regardless of risk factors (Belksy & Feron, 2002).

Attachment and book reading in the home are related. Across SES backgrounds securely attached children (Bus & Van Ijzendoorn (1988, 1995.)

- Are more likely to be to frequently.
- Require less discipline when being read to.
- More often try to read on their own and show faster early literacy development.

These are correlational results. There might be bidirectional relationships between book reading and attachment.
Implications for the Early Childhood Education Community

- Provide parents guidance related to responsive parenting.
- Build relationships with programs that deliver services to families who may need special support. Proven programs that use video-based coaching with education.
  
  - In the home:
    - Play and Learning Strategies (Landry et al., 2008, 2012)
  
  - In pediatric clinics:
    - Video Interaction Project: (Mendelson et al., 2005, 2007)
      https://www.videointeractionproject.org/
    - Thirty Million Word Project: (Suskind et al., 2016, 2017)
      https://tmwcenter.uchicago.edu/
Self-Regulation/Executive Function (EF)

- **Behavior regulation**: avoiding impulsive emotion-driven actions
  - Example: Marsh mellow task
  - Wrapped present task

- **Cognitive regulation**: maintaining a focus, tuning out distractions, holding verbal directions in mind
  - Example: Head-Toes-Knees-Shoulders

- Language ability contributes to its emergence
Long-term Effects of EF

- A study that included data from 36,000 kindergarten children found that EF at school entry helped predict later reading and math in fifth grade (Duncan et al., 2007).

- Cool EF is especially predictive of growth (Brock et al., 2009).

- Bi-directional effects: Between preschool and the end of kindergarten:
  - Early EF resulted in improved language and academic skills in during pre-k.
  - The improvement in language and academic skills contributed to later growth in EF (Fuhs et al., 2014).
Gesturing and pointing by infants and toddlers:
- Is associated with faster language development (Rowe & Goldin-Meadow, 2009).
- Relates to EF at age 4, with the association being mediated by preschool language ability (Kuhn et al., 2015).

Among children who attended Early Head Start, age 24 month vocabulary predicted EF at 3, 4 and 5 years (Ayoub et al., 2011).

Improvement in vocabulary between 15 and 36 months is an especially strong predictor of EF at age 5 (Kuhn et al., 2016).

Use of language as part of parenting is predictive of EF development and strong EF predicts vocabulary growth (Matte-Gagne & Bemier, 2011; Landry et al., 2002).
EF, Language and Parents

- Watch Tanya noting varied ways she supports Eliza’s language and EF and how Eliza’s abilities make this possible.

- What makes this event on that fosters Eliza’s executive function capacities?

- Eliza was 18 months old and being raised to be bilingual. She used between 20 – 30 words.

  ..\..\..\..\..\Desktop\C-PIN\Eliza bk rdg short.mov
EF, Language and Parents

- Activity setting: predictable time, location material, activity
- Eliza leads, Tanya supports and directs on occasion in a sensitive, warm manner.
- Tanya uses language while she makes suggestions.
- Tanya’s uses many novel words and complex syntax.
- Tanya uses language for many purposes: labeling objects, describing actions, talking about feelings, talking about past events, directing actions.
- Eliza is fully engaged in having fun and uses language freely.
Strong EF Helps Children Gain More from ECE Learning Opportunities

- In preschool, 4 year olds’ EF helped predict fall-spring growth in academic skills among children who were more fully engaged in learning-related behaviors (such as listening to books, engaging in sustained play) (Nesbitt et al., 2015).

- Children with strong EF are more likely to learn new words when taught through book reading or playful activities (Dickinson et al., in press).
Implications for Classrooms

- Provide children engaging activities that involve multiple steps and require sustained attention:
  - Blocks, puzzles, art
  - Dramatic play
  - Book reading

- Help children stay engaged with predictable routines and systems.

- Minimize (boring) time in large groups.

- Help children stay on task during groups with interesting activities, clear rules and quick reminders.

- Provide many activities that build language.
ADDITIONAL RESOURCES

The Magic Eight

- Reducing Transitions
- Improving the level of instruction
- Creating a positive climate
- Listening to children
- Planning sequential activities
- Promoting cooperative and associative activities
- Fostering high levels of engagement
- Providing math activities

https://my.vanderbilt.edu/mnpspartnership/magic8/professional-development-materials/

The Atlanta Speech School

The Rollins Center

Free online PD courses through their Cox Campus.

- Infant-toddler: 3 sessions
- Pre-k: 7 sessions

https://app.coxcampus.org/#!/courses?track=550c77f53637011100ce3cd4

Additional resource library:
https://app.coxcampus.org/#!/resourcelibrary/?f=&r=
Theory of Mind

- Understanding that other people
  - That you may know things that other do not know and they may know things that you do not know.
  - That people have different ways of understanding the world.
  - That people’s actions are motivated by desires and goals that may not be directly expressed.
- Important capacity for understanding stories.
Theory of Mind

- Important capacity for understanding stories.

- Watch and discuss: (1:00)
  - What role does theory of mind play in understanding this story?
  - How does Jana support her daughter’s understanding?

- Desktop\C-PIN\Minerva Louise.MOV
Children begin developing a theory of mind (TOM) in the preschool years.

TOM development in the preschool years is related to:
- Social competence (Razza & Blair, 2009)
- Language (Muller, 2012)
- Executive function (Korucu et al., 2017)

All three emerging capacities are mutually reinforcing.
What Experiences Support TOM Development?

- Talk about mental states
  - Mothers’ and children’s use of mental state words when they were 3 and 4 years old was predictive of TOM (Ruffman, et al., 2002).

- Syntactic development:
  - Mental state words are used in syntactic structures called complements using phrases such as “she thinks,” “I wonder/believe/recall ....”
  - Acquisition of skill using this syntactic form is related to TOM skill (Schick et al., 2007).

- Book reading
  - Talking about states of mind during book reading may support TOM development (Tompkins, 2015).
Language, EF and ToM

▶ Language and EF are related beginning at 14 months and their effects continue through the school years. (Ayoub et al., 2011; Landry et al., 2002; Matte-Gange & Bernier, 2011)

▶ These capacities foster the development of the other.
  ▶ Better EF helps with language learning.

▶ Theory of mind develops later and draws on language and contributes to literacy development.
The Intertwined Nature of Development

Language-rich interactions help foster attachment, executive function, and theory of mind. These capacities are intertwined and mutually supportive. Development of all begins very early and continues through the preschool years.
Language and Reading Comprehension
The Simple View of Reading

Beginning readers’ primary challenge

Decoding: turning print into words

Self-Regulation

Implements learning from instruction

Language Comprehension

Helps with initial reading. Critical for comprehension.

By grade 4 language comprehension is the strongest predictor of reading comprehension (Cain et al., 2016; Vellutino et al., 2006).