

Parts I & II: Inferencing, narrative, & school talk: Preparing preschoolers for success in classroom interaction & reading comprehension



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Presented at
The OSLHA Convention
March 12, 2010

I. Goals for the day

A. Background discussion

1. What we will and won't focus on today
2. Very brief theoretical foundation
3. Model of two pathways to reading comprehension
4. Background on oral language skills that lay foundations for later reading comprehension (definitions, relationship to later reading, deficits in children with language impairment, assessment, interventions)
5. The centrality of inferencing to most of these skills

B. Intervention discussion

1. Why book sharing is ideal context for INITIALLY fostering preschool foundations for later reading comprehension
2. Cultural variation in conversational socialization that is foundational to interactive book sharing
3. Book sharing interventions
4. Teaching adults about school talk (time permitting)

II. What our focus is and is not today (ALL ARE IMPORTANT)

A. Book sharing style versus content: we'll focus on the **CONTENT** of the discussion that goes on

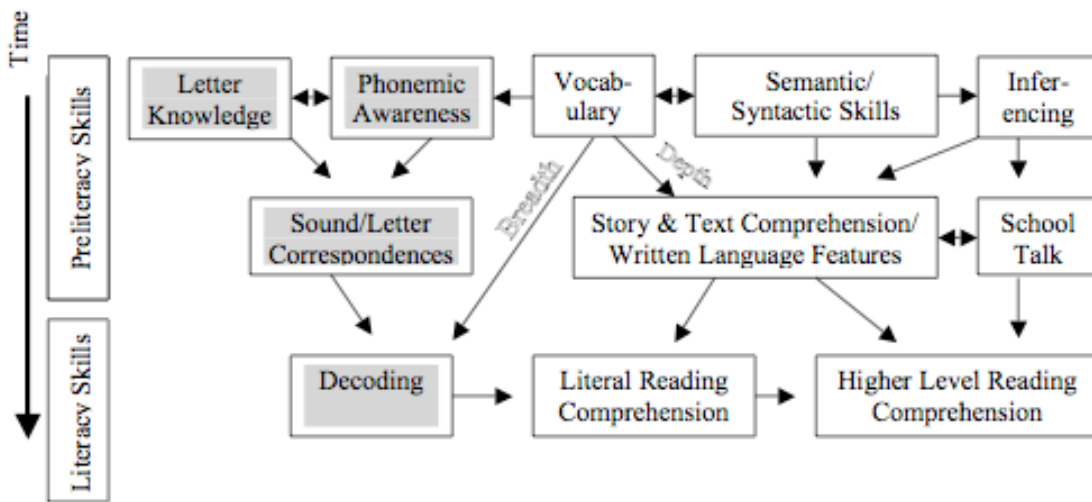
B. Two dimensions of reading

1. Decoding and comprehension: we'll focus on foundations for **COMPREHENSION**
2. Comprehension Itself Has Two Dimensions: we'll focus on both
 - a. Literal (shallow) comprehension
 - b. Higher level (deep) reading comprehension: going beyond literal comprehension of text to engage in inferencing in order to explain, define, hypothesize, summarize, relate to other information, compare & contrast, judge, predict, evaluate, and so forth

- C. Preliteracy skills are fostered in *many* contexts
 1. We'll focus on **BOOK SHARING**
 2. There are many genres of books – we'll focus on **STORY BOOKS**

III. Theoretical models of preschool pathways to later reading comprehension

- A. Single-path model
 1. Dominated for last decade
 2. The phonological pathway or the phonological processing core deficit
 3. In formal reading instruction, child initially spends majority of time decoding, eventually becomes more fluent & automatic, & can finally devote more & more mental energy to comprehension.
 4. Problem with single path model: Many children who have adequate phonological abilities and are able to decode print nonetheless develop reading disabilities focused on reading comprehension
- B. Two-path model
 1. One path is the phonological path of the single-path model -- these children have difficulty with phonological awareness and learning to decode in the early stages of learning to read (see Price & Ruscher, 2006, for an excellent overview and approach to clinical intervention in areas of phonological awareness and letter knowledge)
 2. The other path is a nonphonological (e.g., lexical, semantic, syntactic) causal path to later reading difficulties -- these children have difficulty with later comprehension skills
- C. Van Kleeck's elaborated parallel-path model (from van Kleeck, 2007)



1. Model emphasizes the **SIMULTANEOUS** development of preliteracy foundations for DECODING and COMPREHENSION
2. Phonological pathway has been well studied, and effective interventions have been in use for some time. These skills are **CRITICALLY** important; they just are not the only thing we need to think about in preparing preschoolers for literacy and general academic success.

3. Model of phonological pathway works well for transparent alphabetic orthographies (e.g., Spanish), but for English, sight word recognition, vocabulary, and semantic-syntactic skills must also be drawn upon to compensate for the opaque nature of the sound-letter correspondences
 4. The non-phonological pathway leads us to think about a different pathway to later literal reading comprehension, and an essential pathway to higher-level reading comprehension.
 5. We'll focus today on the oral language foundations, with particular emphasis on those important to higher-level reading comprehension that are virtually ignored in thinking about prereaders: vocabulary depth, inferencing, story comprehension, and "school talk"
 6. Evolution of Definition of Functional Literacy (from van Kleeck, 2006): Only since mid- to late 20th century has the general population needed the higher levels of comprehension required to interpret, analyze, synthesize and explain
- D. Two sets of experiences for two different paths
1. Need to distinguish later INDEPENDENT reading comprehension from earlier ADULT MEDIATED text comprehension
 - a. Adult mediated text comprehension allows for development during preliteracy and early literacy in key areas that support later reading comprehension, including higher-level comprehension.
 - b. Adult mediated comprehension with preschoolers occurs via
 - (i) Participation scaffolding (questions and support for answering)
 - (ii) "Think aloud" episodes (cognitive modeling when child unable to answer)
 - (iii) **NOT** via explicit teaching of comprehension strategies as are used with older children
 2. Research shows that the experiences that support later decoding versus reading comprehension (particularly higher level comprehension) are generally DIFFERENT (reviewed in van Kleeck & Norlander, in press)
 - a. Children learn about print form (i.e., alphabet letters and sounds) from alphabet & rhyming books and other activities, but NOT from storybook sharing.
 - b. Children learn the foundations for later text comprehension (vocabulary, story structure, inferencing) from storybook & expository book sharing, but NOT from alphabet & rhyming books & activities
 3. Most time spent with NONPHONOLOGICAL oral language skills with preschoolers (reviewed in van Kleeck, 2006)
 - a. In middle-class families, more time spent in meaning-focused, comprehension supporting activities with preschoolers
 - b. Meaning-oriented discussion becomes increasingly more complex as preschoolers mature.

IV. Oral language skills in van Kleeck model important to later reading comprehension

A. For each skill

1. What it is
2. Research on relationship of skill in preschoolers to later reading ability
3. Research on deficits in children with language disorders

4. Assessment
 5. Interventions available
- B. **Vocabulary breadth vs depth** derived from models of mental lexicon
1. Definition
 - a. Distinction
 - (i) Breadth (how many words are known; phonological representations)
 - (ii) Depth (richness, quality, or extent of the semantic representation)
 - b. Relationship of breadth to later reading comprehension is via impact on decoding related skills
 - (i) Related to phonemic awareness via neighborhood density
 - (ii) Related to decoding ability
 - c. Depth – elaborating on semantic knowledge
 - (i) Examples
 - Knowing multiple senses of a word
 - Understanding of affect or attitude conveyed by word choices
 - Connections with other words – synonyms, co-hyponyms, superordinate terms subordinate terms
 - What words it co-occurs with
 - (ii) Related to later reading comprehension
 2. Research: Tons of studies showing relationship between vocabulary during preschool and later to later reading development
 3. Vocabulary deficits in children with language delays: vocabulary is generally delayed to the same extent as syntax (i.e., similar to that of MLU matched children), although they may have even greater difficulties with verbs
 4. Assessment
 - a. examples
 - (i) Receptive vocabulary **BREADTH** (many standardized tests available): *PPVT-IV*
 - (ii) Receptive vocabulary **DEPTH**: *Test of Semantic Skills-Primary (TOSS-P)*– identifying labels, categories, attributes, functions, and definitions
 - b. Context: framing the assessment context with “By Myself Bear”
 5. Intervention
 - a. Book sharing interventions, over and over in the research, improve children’s vocabulary
 - b. Resource for more specific ideas for fostering vocabulary during book sharing: Chapter by Hindman & Wasik, in a book edited by van Kleeck, 2006
- C. **Written Language Features:**
1. What they are: Features more frequent, and more variety of them, in written than spoken language
 - a. **Conjunctions** (temporal, causal, and coordinating)

Example: Temporal

 - Spoken: “next,” “then”

- Written: “thereupon,” “once upon a time,” “ever after”
- b. **Elaborated noun phrases** (e.g., using modifiers, qualifiers, and relative clauses)

Example: Modifiers

 - Spoken: “The *great big green bug* got in his backpack.”
 - Written: “A *rather huge and frightening looking bug* climbed into his backpack.”
 - c. **Mental and linguistic verbs** (that refer to thinking and speaking)

Examples:

 - Emotional state: *amaze, anxious, applause, clutching her heart, exclaim, solemn, reproachfully*
 - Cognitive state: *reluctant, insisted, convince, clever*
 - d. **Adverbs** (e.g., of time, manner, place, and degree)
2. Relationship to reading comprehension: Understanding written language features is logically important to later reading comprehension
 3. Assessment: no formal measures
 4. Intervention: No specific research
 - a. Just repeatedly reading stories to preschoolers will expose them to written language features. The TEXT itself provides the exposure. Nothing else special needs to be done.
 - b. Having children practice telling and retelling stories will give them opportunities to practice these language features
- D. **Story comprehension** (reflected in story retelling ability)
1. What it is: The initial study of the structure of fictional stories began decades ago, and all of these researchers came up with fairly similar dimensions of stories that center around a problem and attempts to solve it.
 - a. Characters
 - b. Setting
 - c. The story has a goal, which attained through a series of episodes.
 - (i) **Initiating events**, that can either be a simple goal-directed action, or it may be some kind of trouble or difficulty that arises.
 - (ii) The initiating event motivates the protagonist’s **internal response**.
 - (iii) This may be followed by an **internal plan** to overcome the difficulty.
 - (iv) In a single-episode story, the protagonist makes an **attempt** to achieve the goal or deal with the difficulty posed by the initiating event.
 - (v) There is also the **consequence** of the attempt, and reactions to goal attainment.
 2. Development: An approximate developmental progression of narrative skills can be gleaned from the research primarily focused on middle SES, European American children
 - a. From the time children can talk, they are exposed to simple stories during book sharing and as such to the elements of story grammar.
 - b. Shortly after children begin talking, adults engage them in discussions about personal events they have mutually experienced in the past or about fictional stories encountered in storybooks.

- c. The first well-constructed narratives preschoolers are able to generate on their own concern personal events that have high emotional content; Later narratives about emotionally neutral personal events come in.
 - d. Initially, the fictional stories they generate are their own not complete stories, because no goal is stated.
 - (i) But when adults provide support for the child, such as asking questions or providing picture that depict the goal resolution, preschoolers do much better at included the essential elements of story grammar in their fictional story narratives
 - (ii) By about 6 years of age, although children typically do not yet successfully develop a plot when telling stories on their own, they do provide several elements of story grammar, including the setting, initiating event, and the character's goals
 - (iii) By around 8 years of age, children are finally able to include goals, motivations, and reactions in generating more sophisticated stories
3. Relationship to reading ability
- a. Narrative skills contribute directly to reading achievement and appear to be more important as children get older and higher levels of reading comprehension are required
 - b. Narrative story retell was BEST predictor of 3rd grade reading comprehension in a study of 1,500 Spanish/English bilinguals in kindergarten through 3rd grade
 - (i) Also of great clinical significance: elicited an average of 40 utterance in 3 to 5 minutes having children retell wordless picture book, *Frog Where Are You?*
4. Narrative deficits in children with language delays:
- a. Less knowledge of story structure
 - b. Use of fewer words, propositions, and embedded clauses in their stories
 - c. Problems with cohesion
 - d. Difficulties in repairing story meaning
 - e. Occasional absence of story components
5. Assessment
- a. Standardized
 - (i) *The Renfrew Bus Story*
 - (ii) *Woodcock Johnson III-AC: Story Recall* Subtest is psychometrically weak at the 4 year-old level
 - (iii) *Test of Narrative Language* doesn't begin until age 5;0
 - (iv) *Strong Narrative Procedure (SNAP)* Grades 1 – 7 (not available)
 - b. Criterion referenced ways to score children's narratives (for ages 5 and above)
 - (i) Justice, L. M., Bowles, R., Eisenberg, S. L., Kaderavek, J. N., Ukrainetz, T. A., Gillam, R. B. (2006). The index of narrative microstructure (INMIS): A clinical tool for analyzing school-aged children's narrative performance. *American Journal of Speech-Language Pathology, 15*, 177-191.

(ii) Petersen, D.B., Gillam, S.L., & Gillam, R.B. (2008). Emerging Procedures in Narrative Assessment: The Index of Narrative Complexity. *Topics in Language Disorders, 20*, 111-126.

c. Informal Assessments

(i) Story comprehension determined by story retell

- When methods are used that make story retelling easier for young children, not surprisingly, they are able to demonstrate their knowledge of story structure at younger ages. Methodologies have ranged from looking at children's ability
 - ⇒ To spontaneously produce stories on their own (without providing any external support) by simply asking them to "Tell me a story"
 - ⇒ To providing a variety of levels of support.
- Some researchers have suggested that assessing children's narrative ability with no support is not a very pure measure of their narrative skills, as the task confounds memory with narrative ability.

(ii) Answering questions embedded in stories: Our informal assessment

- We are developing an informal assessment that embeds literal and inferential questions in stories to assess inferencing, story comprehension and vocabulary
 - ⇒ We created four stories to control for
 - ◆ Linguistic parameters: number of sentences, mean length of sentence in words & morphemes, type-token ratios
 - ◆ Story parameters: number of episodes, common background knowledge of US preschoolers regardless of cultural background or SES, number of pages, number of pictures
 - ◆ Questions: number of literal and inferential questions in each story that related to each element of story grammar
 - ⇒ Called STRIVE: **ST**orybook **R**etell **I**nterferencing & **V**erbal Display **E**valuation

E. Intervention: Number of studies

F. School talk

1. What is it?

- a. A culturally determined pattern of language use
- b. Two types (many other terms used, but boils down to talk designed to either):
 - (i) Display knowledge
 - (ii) Build knowledge
- c. Both types important: Although many scholars suggest that discussions that "build knowledge" are the most effective, Cazden (2001) argues that we need **both** of these types of classroom discourse.
- d. Ratio of two types with preschoolers

- (i) Majority of questions (60 - 70%) being "show what you know" to guarantee child success & enhance participation
 - (ii) Minority of questions (30 - 40%) designed to challenge child to think & thereby promote cognitive/linguistic growth (inferencing questions)
- e. Contrast with everyday social talk (from van Kleeck, 2006a)

| | Everyday Social Talk | School Talk |
|---|--|--|
| Goals | To achieve social relatedness and harmony in order to maintain social structure | To achieve cognitive clarity, precision, and accuracy in order to advance intellectual understanding |
| Functions | Language for daily living Primarily used to regulate social relationships (logical function subordinate) (Westby, 1985) | Language for formal learning Used to regulate thinking or planning (Westby, 1985) and to transmit scientific, logical information (Westby, 1985) |
| Locus of meaning/ sources of inference | Embedded in physical and social context Supported by personal and shared experience | More independence (disconnect or remove) from physical and social context Greater reliance on linguistically coded meaning alone, hence, greater representation demand |
| Topic | Everyday objects and situations (Westby, 1985) Topic-associated organization (Westby, 1985) | More abstract or unfamiliar objects and situations (Westby, 1985) Topic-centered organization (Westby, 1985) |
| Relevance | Immediately relevant | Separated from immediate relevance |
| Turn-taking | Usually balanced dyadic interaction More opportunity to request clarification More turns | Authority (teacher/adult) is primary initiator of interaction Less opportunity to request clarification Longer waits while others talk |
| Discourse focus | Around enactment or experience (doing more important) (Watson, 2001) | Around signification and interpretation (verbal reporting more important) (Watson, 2001) |
| Display | | Verbal display of knowledge in response to known information questions |
| Linguistic devices | Familiar words (Westby, 1985) Slang (Westby, 1985) and colloquial forms Many pronouns (Westby, 1985) Repetitive syntax and ideas (Westby, 1985) | Unfamiliar words (Westby, 1985) Superordinate terms Colloquial forms discouraged Specific reference/vocabulary (Westby, 1985) Concise syntax and ideas (Westby, 1985) Cohesions more based on formal linguistic markers |

| | | |
|--|---|---|
| Linguistic devices | <p>Familiar words (Westby, 1985)</p> <p>Slang (Westby, 1985) and colloquial forms</p> <p>Many pronouns (Westby, 1985)</p> <p>Repetitive syntax and ideas (Westby, 1985)</p> <p>Cohesion more based on intonation (Westby, 1985)</p> <p>Passive voice rare</p> <p>First-person pronoun frequent</p> <p>Additive structures</p> | <p>Unfamiliar words (Westby, 1985)</p> <p>Superordinate terms</p> <p>Colloquial forms discouraged</p> <p>Specific reference/vocabulary (Westby, 1985)</p> <p>Concise syntax and ideas (Westby, 1985)</p> <p>Cohesions more based on formal linguistic markers (therefore, however, moreover, etc.) (Westby, 1985)</p> <p>Passive voice used (Watson, 2001)</p> <p>Avoidance of first-person pronouns (Watson, 2001)</p> <p>Abstract subjects (Watson, 2001)</p> <p>More subordinate/relative clauses to specify and foreground and background linguistically (Denny, 1991)</p> |
| Cognitive and perceptual orientation | | <p>Enhances analysis of two-dimensional patterns and ability to represent depth in two dimensions (Rogoff, 1981)</p> <p>Enhances hierarchical/paradigmatic/taxonomic organization of information (e.g., Bruner, 1986; Denny, 1991; Watson, 2001)</p> <p>Enhances use of general propositions (e.g., Bruner, 1986; Hall, 1972; Scribner, 1974; Watson, 2001)</p> <p>Enhances reflection on cognition (Bruner, 1986) and language (Watson, 2001)</p> <p>Enhances description and explanation (Bruner, 1986; Fiske, 1995)</p> <p>Enhances logic involved in systematic hypothesis testing (Rogoff, 1981)</p> |
| <p>From van Kleeck, A. (2006) Cultural issues in promoting dialogic book sharing in the families of preschoolers. In A. van Kleeck (Ed.), <i>Sharing books and stories to promote language and literacy</i> (pp. 179-230). San Diego: Plural Publishing.</p> | | |

2. What does school talk ability influence including, but in addition to, reading comprehension?
 - a. Thinking
 - b. Learning
 - c. Identity
 - d. Teacher's perceptions of child
3. School talk in children with language delays

- a. As assessed using the *PLAI* & *PLAI-2*, preschoolers with language delays are significantly weaker at classroom discourse skills than are their peers who are typically developing
- 4. Assessment: *Preschool Language Assessment Instrument Second Edition (PLAI-2)*
- 5. Intervention: We'll discuss later

G. Inferencing

1. What is it? Contrast with literal text comprehension/ literal language
 - a. **Literal** -- all information needed for comprehension is provided in pictures or language/text
 - b. **Inferential** -- information needed for comprehension or elaboration is not directly supplied by pictures or language/text, but must be filled in by
 - (i) Connecting different parts of text (bridging)
 - (ii) Using background knowledge
 - c. Skills that support inferencing ability
 - (i) Literal language comprehension
 - (ii) Background knowledge (world knowledge)
 - (iii) Cognitive ability
 - (iv) Knowledge of story structure
 - d. Inferencing as the linchpin of several of the oral language skills foundational to later reading comprehension
 - (i) Vocabulary depth
 - (ii) Story comprehension
 - The centrality of inferencing in narrative /story comprehension is acknowledged over and over in research & scholarship
 - (iii) School talk
 - **Decontextualized** when discussion removed from physical & social context
 - **Literal** when information needed is directly provided in language
 - **Inferential** when it requires information not directly presented in language or physical context
2. Critical importance of inferencing to reading comprehension
 - a. Foremost among the text-level skills important to later reading comprehension is the ability to engage in inferencing
 - b. Inferences are the cement of the mental representations essential to text comprehension
 - c. Why focus on inferencing with preschoolers?
 - (i) A growing body of research in the cognitive sciences demonstrates that inferencing is clearly within the developmental purview of preschool children
 - (ii) Research on book sharing in middle-class, European American families shows that inferencing is frequently modeled and requested in the adults' discussions that go beyond the text (see van Kleeck, 2006b, for a review)
3. Preschoolers with language impairments: Some evidence of weakness in inferencing
4. Assessment

- a. The two higher levels of the *PLAI-2*, mentioned earlier, involve a lot of inferencing
5. Intervention
- a. Book sharing context:
 - (i) Inferential and literal language use in different contexts that provide more or less social and physical/perceptual support (adapted from van Kleeck, 2006b)

Relative Difficulty of Literal and Inferential Language in Different Contexts

| Activity | | Social and Physical Context | | | | | | |
|-------------------------|------------------|---|---------------------------|-----------------|----------------|---------------------------------------|------------------------------|--|
| | | Embedded In \longrightarrow Increasingly Disembedded From | | | | | | |
| | | Ongoing Concrete Experience* | Past Concrete Experience* | Book Sharing* | | Classroom Decontextualized Discussion | Independent Test Performance | |
| | | | | About a Picture | About the Text | | | |
| Location of Information | In talk/text | Literal | Easiest | | | | | |
| | Beyond talk/text | | Inferential | Harder | | | | |

* Adult-supported discussion

■ = Adult-supported text inferencing

→ = Direction of generally increasing difficulty

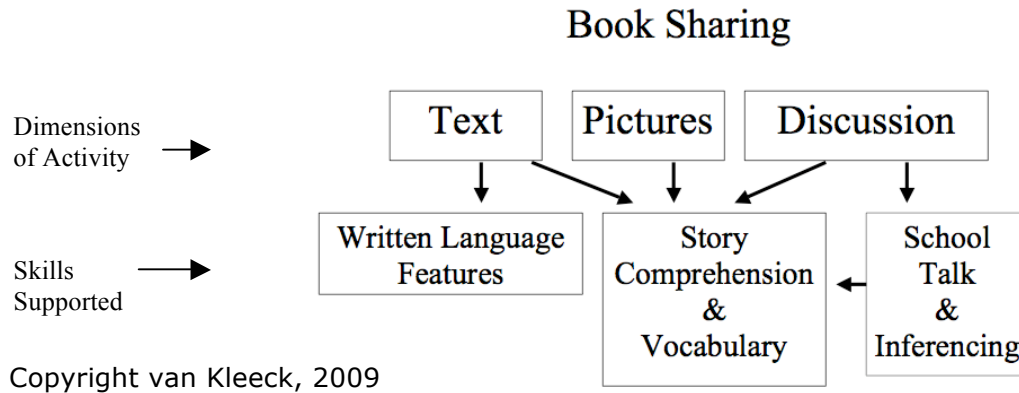
Adapted from A. van Kleeck (Ed.) (2006). *Sharing books and stories to promote language and literacy*. San Diego: Plural Publishing.

- (ii) We'll review a study fostering inferencing in preschool children with language delays later

V. Why book sharing is ideal context for fostering preschool foundations for later reading comprehension

- A. The first reason is purely pragmatic -- book sharing is a simple and inexpensive activity that can ideally fit easily into the daily schedule and context of a preschool classroom or family routine.
- B. Storybooks are very well suited to vocabulary development because they contain rarer vocabulary than daily conversation
- C. Storybooks are an excellent bridge between everyday social talk and classroom discourse or "school talk," as discussed earlier
- D. Lots of opportunity to engage in inferencing during storybook sharing
 - 1. Majority of the discussion adults engage in with preschoolers during storybook sharing remains at the literal level, but, over time a greater percentage of their discussion involves higher levels of reasoning required for inferencing
 - a. Van Kleeck (2006b) analysis of book sharing interactions: Overall averages for 150 middle-class, parent-child dyads – about 60% literal and 40% inferential (about 28 to 47%)

2. During book sharing interactions, children and parents tend to match each other's literal or inferential language when discussing the book (Hammett, Bradley, & van Kleeck, 2002).
- E. Frequent story exposure helps children learn about the features of language that are frequently emphasized in written language, but are quite rare in everyday social discourse



VI. Cultural Variation in Conversational Socialization and Book Sharing (from van Kleeck, 1994, 2004; 2006a, 2006b)

- A. What is culture?
 1. Definition
 2. Cultural variables
 3. Why care about culture?
 4. Mainstream as a cultural group
- B. Pitfalls and necessity of considering cultural variation
 1. Dangers of talking about cultural trends is tendency to view members of a particular culture as if they were:
 - a. Homogeneous or monolithic entities
 - b. A static replica of the traditional culture of their country of origin, rather than changing dynamically across time
 - c. Mechanistically determined by their culture
 2. Still need to understand POSSIBLE group differences:
 - a. To provide all children the opportunity to learn in the classroom environment
 - b. To allow for more sensitive, respectful, and effective communication between members of different cultural groups, in classrooms and elsewhere
 - c. To help avoid the pervasive tendency of professionals to blame parents for their children's lower achievement
- C. General conversational socialization
 1. Relates to learning to interact during book sharing and engaging in school talk
 2. Broad influences on how children are socialized to talk with adults
 - a. General ideas about nature of teaching & learning

- (i) School Culture: Much discussion entirely “linguistically constructed”
 - (ii) Mainstream Home Culture: Activities often accompanied by step-by-step verbal explanation
 - (iii) Other Groups Home Culture: Learning may be accomplished more by observation & teaching by demonstration rather than discussion (e.g., Latino, Native American)
- b. Value of children’s talkativeness
- (i) School Culture: Children who talk more are viewed as knowing more and being smarter
 - (ii) Mainstream Home Culture
 - Highly verbal child is smart; “shy” children are not
 - Talkative child valued
 - (iii) Other Groups Home Culture
 - Quiet child is valued (e.g., Latinos, African American, Native American, Puerto-Rican American, Japanese & other Asian/Pacific groups)
 - Quietness viewed as
 - ⇒ Respectful
 - ⇒ Good
 - ⇒ Intelligent
 - Talkative child viewed as
 - ⇒ Self-centered
 - ⇒ Discourteous
 - ⇒ Undisciplined
 - ⇒ Unintelligent
- c. Attitudes, beliefs, & practices regarding whether children’s conversational participation is encouraged or discouraged
- (i) Mainstream Culture Adults **Encourage** Their Children’s Conversations by
 - Prompting child’s participation by asking lots of questions
 - Expanding child’s utterances;
 - Asking “known information questions”
 - Following the child’s lead in conversational topics, including responding to child questions
 - Asking child for clarification
 - (ii) Alternative Beliefs, Attitudes, and Practices That May **Discourage** Children’s Conversational Participation:
 - Paying more attention to child when not talking than when talking
 - Not asking child a lot of questions to keep conversation going
 - Not responding to/ignoring child’s questions
 - Believing it is adult’s role to issue directives and child’s role to follow them Not believing child should initiate conversation or topics
 - Expecting children to listen and observe Not following child’s conversational lead

- Believing children ask too many questions
- D. Cultural differences in book sharing with preschoolers
1. Age Book Sharing Begins
 - a. Latinos may not believe children ready for books until 3- to 5-years-old, and often not until 5 which is “age of reason”
 - b. European Americans very often begin reading to babies before a year of age
 2. Cultural and SES Variation in Story Book Sharing Interactions
 - a. Amount of interaction
 - (i) Middle-Class Parents are Highly Interactive During Story Book Sharing
 - (ii) Other Groups: May Have Much Less Book Sharing Discussion
 - b. Amount of verbal display
 - (i) Mainstream Culture; Very common during book sharing & free play
 - (ii) Verbal Display May Be Rare Other Groups
 - Rarely used by African Americans & Latinos, but when it is the use is to
 - ⇒ Chastise among African Americans
 - ⇒ Tease among Mexican Americans
 - No information on use during book sharing
 - c. Some research on the amount of inferencing during book sharing with preschoolers
- E. Cultural/SES variation in socialization once children are in school
1. Goals of school
 - a. Higher SES:
 - (i) Preparation for Management Jobs
 - (ii) Promote: Verbal Skills, Analytic Skills, Critical thinking, Discursive thought, Writing
 - b. Lower SES:
 - (i) Preparation for Industrial and Service Jobs
 - (ii) Promote: Docility, Discipline, Time Management, Honesty, Respect
 2. Preschool classrooms
 - a. Many studies have found that language and literacy development are not well-supported in these classrooms
 - b. More Specific Evidence From Five Preschool Classrooms
 - (i) Children in the income-eligible preschools had “less access to print, fewer opportunities to participate in literacy, and little experience listening to or discussing culturally relevant literature”
 - c. Researchers still find that kindergarten and early elementary grade teachers are often “stuck” in a conceptual framework that blames parents for children’s low achievement in school, an attitude that affects how teachers treat students

VII. Book Sharing Interventions

- A. Dialogic Reading (DR)
 1. What is Dialogic Reading?

- a. To increase children's participation in book sharing adults trained to spontaneously use prompts, with two acronyms used to serve as mnemonic devices for the prompts
 - (i) Dialogic Reading Strategies for 4 to 5 Year Olds: **CROWD**
 - **C**ompletion prompts
 - **R**ecall prompts
 - **O**pen-ended prompts
 - **W**h-prompts
 - **D**istancing prompts
 - (ii) Dialogic Reading Strategies for 4 to 5 Year Olds: **PEER**
 - **P**rompt
 - **E**valuate
 - **E**xpand
 - **R**epeat
2. Research shows that DR improves two of the areas important to later reading comprehension in the Van Kleeck Two-Path Model
 - a. Vocabulary breadth
 - b. General oral language sentence level semantic-syntactic skills
3. Research also talks about problems with treatment fidelity and maintenance with adults from non-mainstream culture backgrounds
- B. Study showing effectiveness of fostering literal and inferential language using scripted embedded questions in children's storybooks (van Kleeck, Vander Woude, & Hammett, 2006)
 1. Based on model of preschool classroom discourse adapted from work of Blank, Rose, & Berlin, 1978
 2. Four levels of questions developed
 - a. Literal levels
 - (i) Level I
 - **Label:** name an object or person (even with "who did X?" kind of questions or "you know what this is called?" or "what do you think that is?"); including negative label ("It's not a X.")
 - **Locate:** locate an object or character, including the use of prepositions, "under the table." Also includes where questions
 - **Notice:** direct attention to a pictured object and either name it or don't name it
 - (ii) Level II
 - **Describe characteristics:** focus on perceptual properties (size, shape, color) or parts of objects or characters; also colors or numbers if there is a referent; specify type of object ("what kind of X?") (Not tied to tense) includes possession "Bear's apple" and quantity words (more, several, some)
 - **Describe/notice scene:** describe or notice actions that are immediately perceptual in text or pictures

- **Recall information:** focus on prior information presented in book during current or previous reading in order to summarize or synthesize information
- b. More inferential levels
- (i) Level III
- **Judgment/Evaluation:** (about characters, objects, or ideas) includes non-perceptual qualities and internal states (sad, hungry); sometimes introduced by epistemic verb (I think, I bet); judgments (beautiful, funny, etc.); providing point of view: an interpretation of what character is thinking or feeling
 - **Identify similarities/differences:** compare and/or contrast between things in book, “that looks like an X,” or between different stages of development of one thing
- (ii) Level IV
- **Predict:** (what will happen next or outcome of story); used when child doesn’t know (or seem to know) story
 - **Factual knowledge/ definitions:** providing general information that is not directly provided in book, defining word meaning; or naming two + subordinates to a superordinate category (“Bees and flies are kinds of insects.”); distinguishing between fantasy and reality (e.g., “Can the bear really fly?”)
 - **Explain:** go beyond story or actions to provide an explanation, often indicated with words like “because,” “so that,” “since,” or responses to “why” questions
3. Study design:
- a. A pretest-posttest design was used to ask if an eight-week, one-on-one book sharing intervention with 30 Head Start preschoolers with language impairments would improve both the literal and inferential language skills of Head Start preschoolers with language impairments
- b. Three different sets of questions were embedded in each book of two books, so there were three versions of each book: Example for Frank Asch’s *Mooncake*
- (i) Version 1 (Questions & Scaffolded Responses)
- Level I: What is this (pointing to mailbox)?
 - ⇒ *a mailbox.* Yes, that’s a mailbox. And see (pointing to little flag on mailbox), here’s the little flag you put up to tell the mail carrier that you have a letter for him or her to pick up.
 - ⇒ *inappropriate response, no response; I don’t know.* It’s the junkman’s mail_____.
 - ⇒ *box.* Yes, it’s his mailbox!
 - ⇒ *inappropriate response, no response; I don’t know.* Box. I think that’s the junk man’s mailbox. It’s where he puts his letters so the mail carrier can pick them up for him. And see (pointing to little flag on mailbox), here’s the little flag you put up to tell the mail carrier that you have a letter for him or her to pick up.

- Level IV:
 - ⇒ Part A: Do you think the junkyard bear lives in this house (pointing to the house)?
 - ◆ yes. Yeah, I do, too.
 - ◆ no. You don't. I wonder. I think maybe he does.
 - ◆ inappropriate response, no response; I don't know. I think maybe he does.
 - ⇒ Do you know why?
 - ◆ *child's appropriate response (mailbox; dog lives there; clothes on line).* Yes, that's right, because (repeat child's appropriate response). And I see one other thing that makes me think he lives there. See, (explain dog house or clothes on line, if child didn't; mailbox could be at a business and not a home).
 - ◆ *inappropriate response; no response; I don't know.* Well, I see a couple of things that make me think maybe the junk yard bear lives in that house. Look (point to clothesline), there are his clothes drying out on the line. That makes me think this is his house. And the dog, I think the dog would live where the junkyard bear lives.

(ii) Version 2 Questions

- Level IV: Why do you think the junkyard bear has a dog?
- Level I: What is that (pointing to the ladder)?
- Level I: What's Bear using to carry all his junk home in (pointing to wheelbarrow)? (Pause; then, if no response) Do you know what that's called?

(iii) Version 3 Questions

- ⇒ Level I: (Pointing to things in wheelbarrow and in junkyard) Wow, look at all of that stuff. (Pointing to bicycle) What's that?
- ⇒ Level I: Oh, what's that (pointing to dog house)?

4. Results: Significant gains for treatment group on
 - a. *PPVT*: omega squared revealed a large effect
 - b. Literal Levels (I & II) of *PLAI*: medium effect size
 - c. More Inferential Levels (III & IV) of *PLAI*: medium effect size
5. Other evidence that book sharing is an effective context for fostering inferencing
 - a. Focus on inferencing and cognitively challenging discussion increases during book sharing over preschool years in middle-class families (e.g., van Kleeck & Beckley-McCall, 2002)
 - b. An average of 40% of book sharing discussion with middle-class 4 year-olds is inferential (see van Kleeck, 2006b, for summary)
 - c. Within interaction, amount of adult inferencing impacts amount of child inferencing (Hammett, Bradley, & van Kleeck, 2002)
 - d. Preschoolers are able to infer the goal structure of stories (Makdissi & Boisclair, 2006; Wenner, 2004)

C. STRIVE (just being developed)

1. What is STRIVE?

a. **Storybook Reading Inferencing & Verbal Display Enhancement**

b. Comparison to 2006 van Kleeck et al. study

- (i) Similar to 2006 study designed to enhance classroom discourse in using embedded questions and “think alouds” to foster both literal & inferential language
- (ii) Different in that inferencing questions will be directly tied to story grammar or elaborate on the story or on vocabulary
 - Inferencing questions will be directly tied to story grammar or elaborate on the story or on vocabulary

2. Designed to foster all skills that underlie later reading comprehension in the Van Kleeck Two Path Model (see page 2)

a. Simply by straight text reading

- (i) Vocabulary breadth
- (ii) Oral language sentence-level semantic-syntactic skills
- (iii) Written language features

b. Via embedded questions and subsequent “think alouds,” inferencing and hence

- (i) Story comprehension: Aspects of story grammar focused on in literal and inferential questions
- (ii) Vocabulary depth: Inferring word meaning from context
- (iii) School talk: Because children are required to answer literal and inferential questions as part of classroom discussions

3. STRIVE rationale

a. Inferencing focus

- (i) Foremost among the text-level skills important to later reading comprehension is the ability to engage in inferencing
- (ii) problems with inferencing have been called the “hallmark of poor comprehension”

b. Literal questions also included

- (i) Literal questions often involve having children display what they already know (see van Kleeck, 2003, for discussion) -- Telling adults what you already know, or “verbal display of knowledge” is an important aspect of classroom discourse or “school talk”
- (ii) Being able to engage in inferencing requires that children have basic literal understanding of a text
- (iii) Keeping some of the book sharing discussion at the literal level also likely keeps preschoolers successful at answering questions about the information presented in books, and thereby encourages their participation in the interaction
- (iv) Natural storybook interactions with 4 year-olds in middle-class families contain approximately 60% literal level questions

c. Develop questions that related to story grammar (see Appendix A, p. 22)

- (i) The centrality of inferencing to the task of narrative story comprehension is acknowledged over and over in research and scholarship
 - (ii) Adults can assist preschoolers' story comprehension by focusing their questions "on events that are more important for establishing the causal structure of the text" thereby provoking them "to think about the causal links" in stories
- d. Initially embed scripted questions and "think aloud" responses into the storybooks before sharing them
- (i) Child participation important and is enhanced by questions asked during text reading
 - Sharing books in a manner that is interactive and elicits their participation achieves even larger effect sizes in fostering children's language growth
 - The general value of asking questions as the story is being read is support by several authors
 - Years of research supporting the value of asking questions during the text to enhance comprehension
 - (ii) Child participation hard to achieve
 - Treatment fidelity difficult for preschool teachers
 - Treatment most effective (and probably easiest) in one-on-one book sharing
 - With questions already developed, teachers will not be trying to manage the behavior and keep the attention of a group of preschoolers, while simultaneously trying to think up questions and comments on-line during the reading session
 - (iii) "Think alouds" have a long history in the reading comprehension research with older children
4. Inferencing and story grammar
5. Examples from Mooncake by Frank Asch
- a. Example 1
 - (i) **Text:** One summer night Bear and his friend Little Bird sat down to watch the moon.
 - (ii) **Setting inference question (characters):** "*Who do you think this story is going to be about?*"
 - (iii) **Think aloud if child has any difficulty answering:** "*I think it will probably be about his bear or bird, or maybe it will be about both of them.*"
 - b. **Examples 2 & 3**
 - (i) **Text:** After while Little Bird said, "I think I feel hungry." "Me, too," replied Bear. "And you know what I wish? I wish I could just jump up and take a bite out of the moon. Mmmmm, how delicious that would be!" "How do you know," chirped Little Bird. "Maybe the moon doesn't taste good at all."
 - (ii) **Informational – Elaboration Inference Question:** "*Do you think Bear could really jump up and take a bite out of the moon?*"
 - (iii) **Story Goal Inference Question:** "*What do you think Bear is going to try to do in this story?*"
 - c. Example 4

- (i) **Text:** Bear thought for a moment.
 - (ii) **Causal inference question related to goal (internal state):** "What do you think Bear is thinking about?"
 - (iii) **Think aloud if child unable to respond adequately:** "Where does Bear want to go, do you remember? That might help us figure out what he's thinking about. He wanted to go to the moon. Maybe he's thinking about how he could get there."
- d. Example 5
- (i) **Text:** Then he went inside and got the bow and arrow. With a piece of string, he attached the spoon to the arrow.
 - (ii) **Causal inference question (attempt) related to goal:** "What do you think Bear is going to do with the spoon and the arrow?"
- e. Example 6
- (i) **Text:** Then he went outside and shot the spoon at the moon.
 - (ii) **Literal question:** "Oh look, where did his arrow and spoon go?"
 - (iii) **Causal inference questions (internal response):** "How do you think Bear feels now?"

VIII. Selecting books

A. Some guidelines (from Jones, IRA, 2004)

1. Choose book that supports and extends a specific strategy or skill based on students' needs
2. Choose books that match child interests
3. Choose books that you love
4. Consider the illustrations
5. Think about culture
6. Vary the genre

B. Some resources: Selected examples for American children, but some will be appropriate for Indian children, too

1. The Read-Aloud Handbook by Jim Trelease (Penguin Books)
2. Books are for Talking, Too, by Jane Gebers (Pro-Ed)
3. Great Books for Babies and Toddlers: More Than 500 Recommended Books for Your Child's First Three Years (Paperback) by Kathleen Odean
4. Parents.com
 - a. Babies: <http://www.parents.com/family-life/entertainment/books/best-books-for-babies/>
 - b. Toddlers: <http://www.parents.com/family-life/entertainment/books/best-toddler-books/>
 - c. Preschoolers: <http://www.parents.com/family-life/entertainment/books/the-all-time-best-books-for-preschoolers/>
5. Tales as Tools
 - a. Book by National Storytelling Association (National Storytelling Press)
 - b. http://www.storydynamics.com/Articles/Bibliographies/doug_bibl.html#learning

6. 101 Best Books – Webbing Into Literacy (lists for Head Start classrooms; includes alphabet, information, story, rhyming, counting, math, song, wordless story)
<http://curry.edschool.virginia.edu/go/wil/home.html>
7. Award winning books – Caldecott Medal winners, Children’s Notables
 - a. Association for Library Service to Children (ALSC): <http://www.ala.org/ala/alsc/alsc.htm>
 - b. MacKin Library Media: www.mackin.com
 - c. Many of these may be too difficult for low-income families
8. Culturally Diverse
 - a. AA: <http://www.scils.rutgers.edu/~kvander/ChildrenLit/afro.html>
 - b. Hispanic:
 - (i) <http://falcon.jmu.edu/~ramseyil/mulhispbib.html>
 - (ii) http://www.hispaniconline.com/hh02/culture_child_read_corner.html
 - The Association of Library Service to Children (ALSC) has compiled a list of children’s books about “Growing Up Latino in the U.S.A.” which can be accessed at: <http://www.ala.org/ala/alsc/alscresources/booklists/GrowingUpLatino.htm>.
 - “Tigretón and Burrito: Books in Spanish for the Young.” Available at: <http://www.journal.naeyc.org/btj/200603/SchonBTJ.pdf>.

IX. Teaching parents and teachers about “School Talk” (see Appendix B, p. 23)

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Appendix A. Broader and Narrower Categories of Inferencing Related to Storybooks and General Types of Questions for Each (Makdissi & Boisclair, 2006; A. H. Paris, 2003; Warren et al., 1979).

| | General Category of Inference | Relation to Story Grammar | General Type of Literal or Inferential Question |
|------------------------------------|--|---|---|
| Tied to Story Structure | Causal (hierarchically related to elements of story) | Initiating Event/ Problem | What is the protagonist's big problem/desire? What is this story about? |
| | | Internal Response | How does protagonist feel or what does protagonist think? Why do you think so? |
| | | Goal | Why did protagonist engage in main actions (attempts) of story? |
| | | Attempts | What did protagonist do? What happened here? What do you think will happen next? Why? |
| | | Consequences of Individual Attempts & Internal Response Solution/Outcome | Did the attempt work? What do you think the protagonist is thinking/feeling here? Did protagonist get what he or she wanted? What was it? |
| | | Theme | How are all the actions/attempts in story related? Think about everything that happened in this story. What advice would you give the protagonist so he or she doesn't have this problem again? |
| Not Tied to Story Structure | Informational (spatial, temporal, referential) | Setting: Location Setting: Time, duration Setting: Characters | Where does this story happen? What time of the day/year is it? Who is this story about? Who is in this story? |
| | Informational-Elaboration | Usually straight additions of world knowledge. | What do you already know about this? |
| | Informational - Definition | Using context of story to define words. | What do you think this word means? Why? |
| | Evaluation | Judgments of morality, convention, or anomaly. | Was that a good thing to do? Is that what we usually do? |

Distinctions Between Home/Social Talk and School Talk to Use in Parent or Teacher Training

How we talk:

Social Talk

- Use familiar words
- Use slang
- Take lots of turns
- Explain a lot less about something if the person you're talking to already knows who or what you're talking about

School Talk

- Use unfamiliar words
- Use more formal words
- Listen a lot more
- Don't assume your listener or reader knows what you're talking or writing about—tell them

Why we talk:

Social Talk

- To get everyday living things done
- To have relationships with our family and friends
- To give information to someone who doesn't have the information

School Talk

- To learn about new things
- To think logically and scientifically
- To show the teacher that we know something (even if the teacher already knows the information)

What we talk about:

Social Talk

- Talk about things that are immediately relevant to us
- Talk about personal things and events that happened or might happen to us or people we know; that are personally important to us, etc.

School Talk

- Talk about things that are not immediately relevant
- Describe, explain, and think about *general things* about people, places, and things we usually do not know about personally
 - May be things we cannot easily experience for ourselves, that are far away, that are from a long time ago, or that are future possibilities