

A LOOK AT THE MANY LAYERS OF QUESTIONING WITH YOUNG CHILDREN
OPEN/CLOSED
LITERAL/INFERENTIAL
CONTEXTUAL/DECONTEXTUAL

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AGENDA

- ? What are question types ?
- ? When does question understanding develop ?
- ? What are types of questions should be used with young children ?

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? WHAT ARE QUESTION TYPES ?

- Closed / Open
- Literal / Inferential
- Contextual / Decontextual
- Convergent / Divergent
 - A brief look at a revised Bloom's Taxonomy

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CLOSED / OPEN

Closed questions (2 definitions)

- can be answered with 'yes' or 'no'.
- can be answered with either a single word or a short phrase.


Open questions

- require a response with more depth and a lengthier response.

BOTH can use wh- questions

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- What color apple does she have? Closed
- What colors can apples be? Open
- Where did she get this apple? Closed
- Where did the apples come from? Open



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LITERAL / INFERENTIAL

Literal questions

- The answer is obvious and directly stated or presented.
 - May require labels, descriptions, actions

Inferential questions

- The answer is implied or not directly stated.
 - May include attitudes, feelings, motives, comparisons, cause/effect, predictions, word meaning


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Literal

- What color apple does she have?

Inferential

- What is her favorite kind of apple?



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CONTEXTUAL / DECONTEXTUAL

Contextual questions

- Response is related to the *here-and-now*
 - references people, objects and action present in the immediate context

Decontextual questions

- Response requires using information removed from the *here-and-now*
 - Includes pretend, narrative, and explanatory talk

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- What color apple does she have?
Contextual
- What color apple did you eat at snack yesterday?
Decontextual



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IN GENERAL . . .

Simple → **Complex**

Closed → Open

Literal → Inferential

Contextual → Decontextual

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CONVERGENT / DIVERGENT
– BLOOM'S REVISED (Sousa, 2011)

Convergent (More literal than inferential)

- Remember – label, recall, define, recognize
- Understand – summarize, discuss, explain, outline
- Apply – practice, calculate, apply, execute

Divergent (More complex than simple)

- Analyze – contrast, distinguish, deduce
- Evaluate – appraise, assess, judge, critique
- Create – imagine, compose, design, infer

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? WHEN DOES QUESTION UNDERSTANDING DEVELOP ?

- When young children developmentally:
 - respond to wh- questions
 - respond to contextual and decontextual language
 - respond to literal and inferential language

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AGE CHILDREN RESPOND TO WH- QUESTIONS

Question Word	Year;Month
What?	2;0
Where?	2;6
Who?	3;0
Whose?	3;0
Why?	3;0
How many?	3;0*
How?	3;6
When?	4 - 6 or older

(Rhea Paul, 2001)

*a response with a number, though not necessarily the right one, is acceptable

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Decontextualized Language

- Rowe (2013) investigated parents' decontextualized language use with their young children at 18, 30 and 42 months and the impact on vocabulary development at 54 months.
- Parents used decontextualized language at the following levels:
 - 2% at 18 months,
 - 7% at 30 months,
 - 9% at 42 months

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Decontextualized Language

- **Narratives** - Talk about events that happened in the past or will happen in the future
- **Explanations** - Talk that requested or made logical connection
- **Pretend play** - Talk during pretend episodes of interaction including making an object represent another; attributing actions, thoughts, or feelings to inanimate objects; assuming a role or persona; enacting scripts or routines between objects, events, concepts, or conclusions

(Rowe, 2013)

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Study Results

- Parents who used more narrative utterances and more explanations with their 3½-year-olds had children with larger receptive vocabulary scores 1 year later.
- There was no association between use of pretend utterances and child vocabulary.

(Rowe, 2013)

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LITERAL and INFERENCE LANGUAGE

- Teaching inferential language as a comprehension strategy in the school years is typical.
 - Strategies include summarizing, evaluating, relating information to prior knowledge.
- Teaching younger children is typically more implicit, not as intentional.
 - Children are exposed to comments and questions adults naturally use like explanations, questioning, modeling answers.

(van Kleeck et al., 2006)

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LITERAL and INFERENTIAL LANGUAGE

- Van Kleeck (1997) found that parents used 70% literal and 30% inferential levels of interaction during storybook reading with their 3½- and 4-year-old children.
- In another study, van Kleeck et al. (2006) found that embedded questioning (based on the 70/30% results) in storybook reading experiences over 8 weeks with Head Start children with language delay positively impacted literal and inferential language development.
 - Bigger effect sizes were seen for literal language than inferential language.

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LITERAL and INFERENTIAL LANGUAGE

- Possible reasons for difference between literal and inferential learning:
 - Children were exposed to more literal questions.
 - Children may need to have a solid level literal language before they can make marked gains at the inferential level.
 - More time may be needed to develop inferential language. (van Kleeck et al. 2006)

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LITERAL and INFERENTIAL LANGUAGE

- Lower-level semantic skills were a stronger predictive indicator of listening comprehension than inferential skills in preschool children (Florit et al., 2013; Kendeou, et al., 2008; Scarborough, 2005).
- Why? The abstract nature of language may still be developing in the preschool years.

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? WHAT TYPES OF QUESTIONS SHOULD BE USED WITH YOUNG CHILDREN?

- Levels of questioning
- Strategies for educators

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4 LEVELS OF QUESTIONS

LEVEL 1 Matching perception **2-3 years**
'look at it'

- questions relate to objects in immediate environment and require concrete thinking
 (simple: closed, literal, contextual, convergent)

LEVEL 2 Selective analysis of perception **3-4 years**
'talk about it'

- questions involve some analysis such as classifying/ grouping objects, describing and understanding object functions
 (a little complex: inferential, decontextual, divergent)

(Blank et al. 1978)

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4 LEVELS OF QUESTIONS

LEVEL 3 Reordering perception **4-5 years**
'think about it'

- questions require children to use their own knowledge to make basic predictions, assume the role of another, or make generalization as they begin to use higher-order thinking skills.

LEVEL 4 Reasoning about perception **5-6 years**
'reasoning'

- questions involve problem solving, predictions, solutions and explanations and require a child's use of knowledge and thinking about the future and past.

(Blank et al. 1978)

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Improving Children's Understanding

- Use questions that the child can understand, then move to more complex, abstract ones.
- Match your conversation to the child's level of understanding, then expand and stretch.
- State information and restate with slight variations so that children are given greater opportunities to understand and process the information they hear.
- Talk **more** rather than less. Comments are vital to expand a child's understanding.
- Make the implicit more explicit.

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Recommendations for Repeated Readings

- **First read** - the goal is to help children gain an overall understanding of the book.
 - Ask literal questions to help children gain a basic understanding of the story
 - Take care to not interrupt the flow of the story
 - Use out-loud thinking to show how you use language to make inferences to problem-solve, reason, and discuss cause/effect
 - Follow-up with questions that elicit thinking and learning strategies (Schickedanz & Collins, 2013; Weitzman & Greenberg, 2010)

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Recommendations for Repeated Readings

- **2nd read** - the purpose of the second reading is to further the children's understanding of the story and provide them with additional opportunities to use language for thinking and learning.
- **3rd read** - the goal of the third reading is to reinforce story comprehension. Your role is to support the children as they reconstruct the story's events. In so doing, talk about the causes of these events and the character's feelings and motivations.

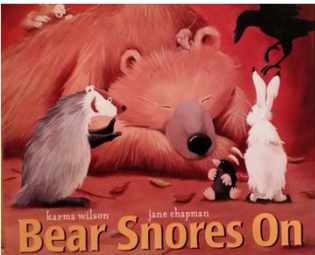
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Selecting storybooks, consider:

- Complexity and potential interest to young children
- Richness of the language
- Values conveyed
- Representative diversity
- Appropriateness and size of illustrations

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"Bear Snores On" Written by Karma Wilson and illustrated by Jane Chapman, published by Little Simon




- Good vocabulary
- Rich language
- Friendship and sharing
- Wonderful pictures
- Narrative, rhyming and pattern book

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What's in the lair? (That's a cave.)


- Closed
- Literal
- Contextual
- Convergent



- What other animals live in a lair or a cave?
 - Open
 - Inferential
 - Decontextual
 - Divergent

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As an itty-bitty mouse, please get up, try, creep-crawl in the cave from the draft and come.

I see sparks, "The logs are dark, too dark," in the light we sleep with a snuff, but quiet.

- How does the itty-bitty mouse get warm?
 - Simple: closed, contextual, convergent
- How do you get warm?
 - Simple: open, decontextual, divergent
- Literal or inferential?

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Two glowing eyes sneak peek in the den. Mouse cries, "What's there?" and a hare hops in.

"The mouse" says, "I'm long thin, mouse!" "So they pop white ears, and they have black in."

- What are they eating?
 - Simple: closed, literal, contextual, convergent
- How did they make the tea and the popcorn?
 - Complex: open, inferential, decontextual, divergent

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A badger scurries by, sniff-sniffs at the air. "I smell yummy cheese! Perhaps we can share?"

The hungry badger says, "Honey nuts would agree. Let's share cheese, and honey nuts, and agree!"

- What is in the badger's bag?
 - Simple: closed, literal, contextual, convergent
- Who has had honey nuts?
 - Simple: closed, literal, decontextual

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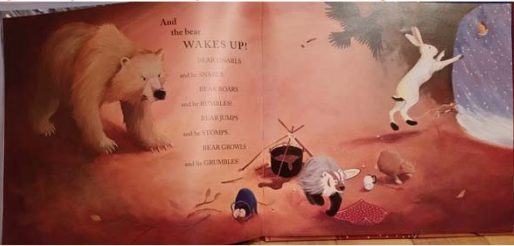
And they nibble and they munch with a CHEW- CHOMP- CRUNCH

But the bear snores on.

- What is an example of a simple question you might ask? Complex?

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And the bear WAKES UP! BEAR WAKES and he ROARS and he BOWLS and he STOMPS and he GROUMBLES BEAR GROELS and the GRENMBLES

- How does the bear feel? How do the other animals feel?
- What will the bear do? What will the animals do?


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