Growing Knowing: Building Children’s World Knowledge through Family Partnerships and Meaningful Engagement with Informational Text (part 1)

Susan Bennett-Armistead
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What is Literacy?

- Reading
- Writing
- Listening
- Speaking
- Viewing
- Visually Representing
So, when does literacy begin?

- Already ready!
- Evidence suggests that even young infants are developing language specific recognition skills. (Kuhl, 1992, 2004)
- We know that shared book reading at 4 months is associated with better expressive language skills during the toddler years (Karras 2005).
- Emergent literacy (Marie Clay, 1966)
- Goal is developing along a continuum
Ask yourself,  

Why do we read?
The purpose of literacy: Comprehension

The ability to extract and construct meaning from text when reading or when read to

Requires:

- Language knowledge
- World knowledge
- Knowledge about text
- Knowledge about genre
Brain scans reveal comprehension secrets!

- **Home Reading Environment and Brain Activation in Preschool Children Listening to Stories**
  - John S. Hutton, Tzipi Horowitz-Kraus, Alan L. Mendelsohn, Tom DeWitt, Scott K. Holland,
  - September, 2015, Pediatrics, vol. 136, issue 3
  - In 19 preschool children listening to stories, greater home reading exposure is positively associated with activation of brain areas supporting mental imagery and narrative comprehension
What is Informational text?

- Duke/Bennett-Armistead definition:
  - Informational text is a subset of non-fiction
- The purpose of info text is primarily to inform about the natural or social world
- The structure of informational text is different from other forms of text in several important ways:
Informational Text Structure

- Contains timeless verbs
- Contains generic nouns
- May be linear or non-linear in nature
- Compare/contrast, cause/effect, problem/solution
- May be read as a whole or in parts
- Some examples: “All about...” books, Question and Answer books, most reference books
Timeless verbs and generic nouns

Mommies Say Shhh!

Birds say cheep, cheep, cheep.
Spiders Spin Silk

Bronwyn Tainui
Linear or non linear
He'd keep a close eye on a creeping crimson Kelp Crab.

The kelp crab lives in forests of giant kelp that grow along the coasts of California, Brittany, and South America. The kelp crab occupies the mid-water and upper portion of the plant, where it finds food and protection in the dense growth. More than 800 species of marine animals can live in one healthy forest of giant kelp. A single plant may sustain more than a million organisms.

The kelp plant, when harvested and processed, prevents crystals from forming in ice cream and gives paint and toothpaste a creamy texture. Extracts from brown kelp are found in over 300 products used by people. Fortunately, giant kelp recovers rapidly from harvesting, growing one to two feet every day.
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Whole or part
Horses from around the world

The different breeds of horse are often divided by breeders into three types. First are “hotbloods,” or “fullbloods” – the Arabian and Thoroughbred breeds. These horses have the same blood temperature as other breeds, so they do not really have “hot blood” but are given the name because of their high-spirited temperament and because they are descended from the Arabian and Barb breeds from the hot countries of North Africa and Arabia. Second are “coldbloods,” which again do not have cold blood but are the large, heavy, calm, draft horses (pp. 50–53) from northern climates. Third are “warmbloods,” or “crossbreeds,” which are crosses between hotbloods and coldbloods. It is this group that supplies most modern sporting horses (pp. 59–61), except for racehorses, which are almost always Thoroughbreds. All Thoroughbreds’ ancestry can be traced back to three famous stallions – the Byerly Turk (c. 1689), the Darley Arabian (c. 1700) and the Godolphin Arabian (c. 1728).
Some examples: “All about…” books, Question and Answer books, most reference books
What are the features of informational text?

- Table of Contents
- Captions
- Headings
- Photos/Illustrations
- Topical
- Glossary
- Index

- Specialized vocab
- Bold or italicized type
- Graphical elements like tables, charts, graphs
- Classifications/definitions
Contents

6 The horse family
8 How horses evolved
10 Bones and teeth
12 Senses and behavior
14 Mares and foals
16 Wild asses
18 Seeing stripes
20 Ancient ancestors
22 Horses in history
24 Donkey work
26 Mules and hinnies
28 Shoes and shoeing
40 More breeds and colors
42 War-horses
44 The age of chivalry
46 Traveling by horse
48 Horse-drawn vehicles
50 Heavy horses
52 Horse power
54 Light draft work
Glossary

**dragline**  the silk thread a spider spins behind itself

**insect**  small animal with six legs

**silk**  fine soft thread made by spiders

**spider**  small animal with eight legs that spins silk

**spider web**  sticky net made by a spider

**spinneret**  the part of the spider’s body that spins silk
Topical

Animal Feet
Caroline MacLulich
for The Australian Museum
Determining Quality Info text

- Accuracy
- Authorship
- Accessibility
- Appropriateness
- Appeal

- Text Type
- Recommendations from others
- YOUR STUDENTS!
Locating Quality Info Text

- Professional Books
- Non-fiction and Information Book Awards
- General Book Awards or Honors
- Publishers’ catalogs
- Your Colleagues
Including Info text in the print rich environment

- Classroom libraries-books, magazines, newspaper articles
- Print-based activities
- Environmental print on walls and other surfaces
- Incorporated into field trips, dramatic play and other times of the day than normally would be used
Developing World Knowledge
Home reading environment is crucial for children's reading skills

V. Bergersen, 14 October 2015  The University of Stavanger

studied 1171 first grade pupils and their parents from 19 schools in Rogaland county, Norway

Found relationships between time reading aloud, parents reading themselves, number of books in the home and children’s vocabulary and phonological awareness in the first grade, predicting ease of literacy acquisition
Features of Informational Text that can be Explored through Read Aloud:

- Genre specific language (generic nouns, timeless verbs)
- Captions
- Graphs
- Taxonomic language
- Para-linguistic devices (bold, italics, underlining)

- Use of realistic illustrations or photos
- Specialized or scientific vocabulary
- Assisting devices such as table of contents, index, glossary
Yay, Dads!

- The Effects of Fathers’ and Mothers’ Reading to Their Children on Language Outcomes of Children Participating in Early Head Start in the United States
- Elisabeth Duursma
- Fathering, Fall, 2014
- Examined paternal and maternal bookreading frequency among 430 low-income families and investigated whether paternal bookreading and maternal bookreading predicted children’s early language and cognitive development and emergent literacy skills.
- Results demonstrated that mothers read more frequently to their toddlers than fathers but approximately 55% of fathers reported reading at least weekly to their children. Paternal bookreading at 24 and 36 months significantly predicted children’s language and cognitive skills at age 36 months as well as their book knowledge at preK. Maternal bookreading was only a significant predictor of child cognitive skills at 36 months.
- Males also asked more and different kinds of questions than females.
Strategies for promoting World Knowledge

- Promoting Primary Experiences with the Natural and Social world
- Reading Aloud Informational Text
- Studying Content
- Expanding Dramatic Play Experiences
Nature Movement

- Children and Nature Network (Richard Louv, Last Child in the Woods)

- [http://www.childrenandnature.org/research/](http://www.childrenandnature.org/research/)

- Build vocabulary

- Promote imaginative play

- Promote curiosity

- Build prior knowledge
Starfish
by Edith Thacher Hurd
illustrated by Robin Brickman
So, what do researchers do?

- Ask questions!
- Find answers!
What do we want to encourage parents to do?

- Support their child’s interest(s)
- Read aloud informational text on the topic
- Explore the natural world with their child
- Recognize that they’re ALREADY enriching their children’s lives by providing experiences for them
- Honor the questioning child’s curiosity
Concluding thoughts:

- The purposeful mix of experiences, talk, questioning, and reading together can build in children
  - Curiosity
  - Skills to answer their own questions
  - Belief that they are capable of finding answers

*Understanding that they are researchers!*
In Part 2:

- Building Knowledge of Genre and How Text Works
- Strategies for instruction with informational text
Contact Info

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Building Knowledge of Genre and How Text Works
But what to read?


- Studied 3, 4 and 5 year olds.

- Reading books with animals that act like people can lead to misinformation. “These results indicate that anthropomorphized animals in books may not only lead to less learning but also influence children's conceptual knowledge of animals.”
Our study

Genre diversification

- Diversifying exposure to genres resulted in greater awareness of differences, similar reading levels, and great ability to produce diverse genres.
Teachers in our study used info text as a direct substitute for narrative throughout their day.

They also used it to reinforce concepts introduced with narrative at other times of the day.

The use of info text resulted in more talk about text features in general.
Effective strategies for incorporating informational text

- Read aloud
- Think Aloud
- Question the Author (QtA)
- Experience-Text-Relationship (ETR)
- Graphic Organizers
Graphic Organizers

- K-W-L-R
- Concept Wheel
- Concept of Definition
- Semantic Feature Analysis
- Venn Diagrams
Concept Wheel

- Helps children come up with definitions that are meaningful to them
- Can be group wheels or individual wheels
K-W-L....R

- What do you know?
- What do you want to know?
- What have we learned?
- What resources might we use to learn the answers to our questions?
K-W-L-R (Ogle Version)
K-W-L-R (B-A Version)
Semantic Feature Analysis

- Consider using your “W” questions/categories across the top of the matrix
- Younger children (Kdg.) can inform the matrix but may have a hard time using to write from
## Semantic Feature Analysis

<table>
<thead>
<tr>
<th>Bears</th>
<th>Color?</th>
<th>Eat?</th>
<th>Habitat?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grizzly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polar</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Venn Diagrams

- Compare two or more concepts/categories
- Consider using hula hoops with younger children and move the words around

Sharks

Both

Whales
Concept of Definition

- Created by Taffy Raphael
- Four questions:
  - What is it? [category and description]
  - What’s it like? [attributes]
  - Some examples
  - Compare examples
Concept of Definition

What is it?

Compare Examples

What’s it like?

Some Examples

Bats
Genres to consider for pairing and comparing

- Basic concept books
- Wordless
- Narrative
- Poetry
- Fairy tale
- Informational
- Procedural
- Children’s own writing
- Biographies
- Joke books
- Alphabet books
Books in the home v. Parent’s education level

- **Books in home as important as parents’ education in determining children’s education level**

- 20 year, multi-country study, found that regardless of location, having books in the home propelled children toward higher levels of education, and while as few as 20 books can make a difference, more is better, having books in the home is TWICE as important as the father’s educational level in predicting a child’s likelihood of obtaining more schooling, the book effect was even more compelling among low income families
What do we want parents (and teachers) to do?

- Read to their children but dialogically!

- Build children’s world knowledge through read aloud of diverse genres, play, and primary experiences.

- Help children make connections between text and experiences “This reminds me of…”

- Build children’s vocabulary and knowledge through read aloud and talking, talking, talking WITH their children. Asking research provoking questions, such as “Why do you think…” “What will happen if….” “How do you think…..”

- Create a climate of curiosity!
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