FAMILY LITERACY IN A DIGITAL WORLD

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Sunshine Coast Region Libraries

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GOALS

- Digital literacy 2002....on wards
- The importance of the early childhood years
- Language development before school
- It’s the interaction
- Books and stories
- Ebooks or traditional storybooks
- Family literacy in diverse communities
Children were accessing the internet in preschool and schools

*Homes has more up-to-date communication technologies than pre/schools

*Inquiry based projects on topics of interest were necessary to engage young children

All forms of signs represent meaning

Semiotic framework for new literacies
LANGUAGE IS A SYMBOL SYSTEM

- Young children are makers, inventors and users of sign systems and symbols.

- A semiotic perspective explores how individuals and groups use print to make meanings as well as using other ‘semiotic resources’ such as oral language, visual imagery, numerical symbols and music (Lemke, 1990).
18 months using Mum’s iphone

Using the ABC app to sing-along.

2011 ten years on...mobile devices
Paper or ebook? It doesn’t matter.
THE IMPORTANCE OF THE EARLY YEARS: RESEARCH

- Children who began school with low achievement in literacy (concepts about print, phonemic awareness) ---often living in high poverty areas

- Children with low levels of literacy prior to school had difficulty catching up without extensive parental/adult support

- Learning in the preschool years impacts on later learning

- The influence of the years before school for literacy development is clearly documented
Early years research continued...

- Unequal access to rich preschool learning opportunities exacerbates wider social and educational inequalities.

- Early years education makes a difference to children's cognitive attainment and subsequent social outcomes.

- Brain-based research articulates the importance of the early years of learning on brain development and later academic achievement.

- Providing early years education is a better investment than paying for remediation programs later in life for problems rooted in poor early development.
PARENTS IN AUSTRALIA

Australian research into parents’ understanding of the importance of reading to very young children (MCEECDYA, 2010) revealed that more than a quarter of parents were not aware of the importance of reading to very young children.

The fathers’ group were less aware of the importance of reading to infants than the other parent groups – 38.7% answered ‘not much’.

Halfon et al. (2001), quoting from a significant American survey, assert that 46% of parents (57% of fathers) did not understand that the first three years are potentially the most critical and the greatest amount of brain development occurs in this period. The survey also found that lower socio-economic status (SES) was associated with less awareness.

Brain research and language
http://www.zerotothree.org/baby-brain-map.html

http://link.brightcove.com/services/player/bcpid4250110001?bctid=587336352001
ORAL LANGUAGE

- Young children need to have control over several aspects of oral language prior to starting the beginning to read process—vocabulary, phonology, syntax, discourse and pragmatics (Snow, Burns, & Griffin, 1998).
Oral language is the key to learning and later literacy development (Dickenson & Porche 2011).

Vocabulary at age 4 is highly correlated to reading comprehension in year 4.

WHAT DO WE KNOW ABOUT LANGUAGE DEVELOPMENT?

- Children aged 10-30 months, of economically advantaged parents heard an average of 382 different words per hour.
- Children of economically disadvantaged parents heard an average of 167 different words per hour.
- By the time children enter school, a conservative estimate is that children who speak English know 4,000-5,000 word families in oral language.
VOCABULARY

- Exposure to rich vocabulary and stimulating discussion in the years before school predicts literacy development in the first year of school and literacy in fourth and seventh grade (Dickinson & Tabors 2002).

- Research strongly supports the connections between children’s oral language development and academic success.
ORAL LANGUAGE CUMULATIVE LANGUAGE EXPERIENCES 30 MILLION WORD DIFFERENCE

HART & RISLEY (2003)

Number of words heard (millions)

Children from:
- Professional Families
- Working Class Families
- Welfare Families

Age of child (years)
<table>
<thead>
<tr>
<th>Age</th>
<th>Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 months</td>
<td>Makes sounds in response to stimulus</td>
</tr>
<tr>
<td>3 months</td>
<td>Makes cooing sounds</td>
</tr>
<tr>
<td>7 months</td>
<td>Makes sounds such as giving a ‘raspberry’</td>
</tr>
<tr>
<td>10 months</td>
<td>Single syllable babbling (‘ma’, ‘pa’, ‘ba’, ‘da’)</td>
</tr>
<tr>
<td>11 months</td>
<td>Multiple syllable babbling (‘mama’, ‘dada’, ‘baba’)</td>
</tr>
<tr>
<td>14 months</td>
<td>Uses mama and dada (or similar sounds) to call</td>
</tr>
<tr>
<td>22 months</td>
<td>Uses some words besides mama and dada</td>
</tr>
<tr>
<td></td>
<td>Has a vocabulary of four to six words</td>
</tr>
<tr>
<td>23 months</td>
<td>Can be understood by parents about half the time</td>
</tr>
<tr>
<td>26 months</td>
<td>Can form two word sentences</td>
</tr>
<tr>
<td>29 months</td>
<td>Has a 50 word vocabulary</td>
</tr>
<tr>
<td>34 months</td>
<td>Uses ‘me’, ‘you’, ‘my’</td>
</tr>
<tr>
<td></td>
<td>Can carry on a conversation</td>
</tr>
<tr>
<td>37 months</td>
<td>Can identify and use ‘cup’, ‘spoon’</td>
</tr>
<tr>
<td></td>
<td>Can be understood by strangers about three quarters of the time</td>
</tr>
<tr>
<td>47 months</td>
<td>Can be understood by strangers most of the time</td>
</tr>
</tbody>
</table>
The average three-year-old has heard 20 million words.

Three year olds from very talkative, socially interactive families have heard 35 million words.

Three year olds of uncommunicative families have heard less than 10 million words.

From Meaningful Differences in the Everyday Experience of Young American Children by Betty Hart, Ph.D., & Todd R. Risley, Ph.D.
Greatly influenced by familial styles of talking and interacting with babies

- The average child has about a **700 word** vocabulary by the age of three

- Children of very sociable families have a vocabulary of about **1,100 words**

- Children of uncommunicative, non-reactive families have only about a **500 word** vocabulary
Beyond “Business Talk”

- The more you talk, the higher the quality of the language

- Quantity results in quality

- All parents engage in “business talk” — imparting necessary information such as “get down from there,” or “don’t do that.”
  - If you don’t talk much, this terse business talk is the only language children are exposed to

- Talk more — that’s when children are exposed to complex and rich communication
Richer language environment birth to 3 years

Mainly determined by the amount of talking parents are doing with baby

- The interaction with adult caregivers is the most important part of baby’s world
  - The amount of interaction makes the environment richer

- Parents don’t have to worry about how to talk to their baby
  - Just talk a lot
CHILDREN PAY ATTENTION TO WORDS

From the beginning

- Talking has an impact from the very beginning
  - It’s important to talk to infants, newborns, and toddlers

- The important variable is filling the child’s life up with words and language — associating words with everything the child is involved in

- Babies are tuned-in really early — even before birth
  - For example, if you sing songs or say poems prenatally, babies will recognize the cadence, the rhythm, and the sounds after they are born
INTERACTION IS KEY

- Young children watch your language
  - They see your eyes light up
  - They watch your mouth

- In addition to vocabulary, they’re learning the rewards of social interaction
Babies don’t learn very much from a distance. They learn very little from watching words on TV or listening to the radio, for example.

Children are immersed in the family “culture of communication” (i.e., talking a lot or a little), and learn from it.
ASSIGNING MEANINGS TO WORDS

- Fast mapping — children hear a word and use the context of an activity, an object, or a person to map meaning on to it
  - For example, if a child’s first exposure to an animal is a dog, from that point forward, every four-legged animal with a tail and two ears is a dog

- Over time, children refine those definitions
  - For example, they learn to differentiate that cows also have four legs, but they make a different sound and they give milk
ASSIGNING MEANINGS TO WORDS (cont.)

- Children who have world experience from interactions, creative play and book reading are the ones who are best able to refine word definitions
  - Exposure to an animal in a book or at the zoo gives them a greater understanding of the definition

- Teaching children the sounds that animals make is not just a game; it is the process of refinement for a young child

- The same story again and again as babies are puzzling about how language works.

Baby read polar bear

http://www.youtube.com/watch?v=qU97IXT8MI8
Two or more languages?
SINGING AND SOUNDS OF LANGUAGE

- If a child is not exposed to certain sounds when they’re young, it’s difficult to acquire them later on
  - An important window of opportunity for brain development has been missed
- Nursery rhymes and songs for rhyme, alliteration, phonemes, rhythm

Baby bounce programs: Rhyme Time

Baby Bounce and Rhyme at Stirling Library

Singing nursery rhymes, action rhymes, personal rhymes.
STORYTELLING AND PLAY

- Puppets help retellings
- Props like toys help retell stories
- Cut-outs of characters and events eg The Hungry Caterpillar
- Simple stick puppets help retelling and the creation of new stories eg Brown Bear, Brown Bear
BOOKS HELP DEVELOP ORAL LANGUAGE

- Reading is an excuse adults sometimes need in order to interact conversationally with babies.

- Oral language development can come from:
  - making up stories
  - singing songs
  - telling nursery rhymes
  - reading and looking at books

For more information, see the Calif. Preschool Instructional Network's Concepts About Print.
Why is shared reading the key to literacy development?

Family scholarly culture and educational success: Books and schooling in 27 nations

- Children growing up in homes with many books get 3 years more schooling than children from bookless homes, independent of their parents’ education, occupation, and class.

(Evans, Kelley, Sikora & Treiman 2010)

Ebooks or paper books it doesn’t matter
What about television?

- Parents who prefer literature benefit their children's education, whereas a preference for watching popular TV programs is disadvantageous for a child's educational success.

From research with 3257 families in the Netherlands (Notten & Kraaykamp, 2010)
SHARED BOOK READING.....

shared book reading with babies, toddlers and three year olds increases child talk and supports children’s understanding of meaning, vocabulary and syntactic development (Schickedanz & McGee, 2010)
Frequency of Word Use in Major Sources of Oral and Written Language (Hayes & Ahrens, 1988)

<table>
<thead>
<tr>
<th>Source</th>
<th>Rare Words per 1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Printed texts</td>
<td></td>
</tr>
<tr>
<td>Abstracts of scientific articles</td>
<td>128.0</td>
</tr>
<tr>
<td>Newspapers</td>
<td>68.3</td>
</tr>
<tr>
<td>Popular magazines</td>
<td>65.7</td>
</tr>
<tr>
<td>Adult books</td>
<td>52.7</td>
</tr>
<tr>
<td>Children’s books</td>
<td>30.9</td>
</tr>
<tr>
<td>Preschool books</td>
<td>16.3</td>
</tr>
<tr>
<td>II. Television texts</td>
<td></td>
</tr>
<tr>
<td>adult shows</td>
<td>22.7</td>
</tr>
<tr>
<td>children’s shows</td>
<td>20.2</td>
</tr>
<tr>
<td>III. Adult speech</td>
<td></td>
</tr>
<tr>
<td>Expert witness testimony</td>
<td>28.4</td>
</tr>
<tr>
<td>College graduates talk to friends/spouses</td>
<td>17.3</td>
</tr>
</tbody>
</table>
It’s not perfect reading: Parents who are reluctant readers

“Perfect” reading is not the point — rather the interaction around the book is of paramount importance.

- We can provide models for what interaction looks like.
  - if you have a 30-page book and a three-year-old child, the point is turning the pages together, the story, the interaction, the talking, being involved with the child, not getting through all 30 pages
  - that wordless picture books help babies learn, too
  - how to tie books and book concepts to things that are important in their own family

- Children should feel that reading is a valuable and fun thing to do with parents
**Dialogic reading**

The parent says, "What is this?" (the prompt) while pointing to the bear. The child says, *bear*, and the parent follows with "That's right (the evaluation); it's a the *Daddy Bear* (the expansion); can you say *Daddy Bear*?" (the repetition).

Dialogic reading
http://www.readingrockets.org/podcasts/reading_aloud/
IT IS THE INTERACTION......DIALOGIC READING

- Prompts the child to say something about the book,
- Evaluates the child's response,
- Expands the child's response by rephrasing and adding information to it, and
- Repeats the prompt to make sure the child has learned from the expansion.

http://www.readingrockets.org/article/400/
TRADITIONAL OR EBOOK?

Research into traditional or ebooks

○ Results indicated mother-child interactions differed in the contexts, with more complex talk evident in the electronic texts. (Kim, & Anderson, 2008).

http://www.youtube.com/watch?v=LGUqe9u56Xo&feature=player_detailpage

http://www.youtube.com/watch?v=x4RYG4LNdmg&NR=1
**EBOOKS OR TRADITIONAL BOOKS?**

- Comparing ebook and traditional picture books, **children** displayed higher levels of persistence during the adult led e-storybook compared to the adult led traditional storybook condition.

However, **children** produced more communicative initiations during the adult led traditional storybook condition.

MORE APPROACHES FOR FAMILY LITERACY

- Hippy
- Let’s Read
- Dad’s and books
- Learning Together
- Mother Goose
- Lap-Sit
- Book Buzz
- Early words
- More...

- Over arching programs
  Little Big Book Club
# Family Literacy Programs - Things to Consider

<table>
<thead>
<tr>
<th>Pedagogy</th>
<th>direct/explicit instruction or indirect eg modelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>adult, child or both; mothers only or all caregivers</td>
</tr>
<tr>
<td>Access</td>
<td>targeted or universal</td>
</tr>
<tr>
<td>Personnel</td>
<td>recruitment, training, support</td>
</tr>
<tr>
<td>Resources</td>
<td>eg online, concrete; free or purchasable</td>
</tr>
<tr>
<td>Literacy practices</td>
<td>book literacy, digital literacy, emergent writing, oral language eg rhyme</td>
</tr>
<tr>
<td>Inclusivity</td>
<td>culturally appropriate texts, use of community languages, recognition of diverse family and household types, disability issues covered.</td>
</tr>
<tr>
<td>Partnership</td>
<td>Involvement of community/clients in design and/or evaluation of program</td>
</tr>
</tbody>
</table>
My Favourite Book Project
RESEARCH QUESTIONS

- What do young Aboriginal children choose to read?
- What is read to young children by others (parents, grandparents, pre-school teacher, teacher, siblings), and who chooses what is read?
- What is the availability of reading material?
- Why some reading material is favoured by young Indigenous children?
METHODODOLOGY

- 20 families in Ceduna, 30 children
- Aboriginal research paired with non-Aboriginal researcher (reciprocal)
- 3 home visits
- My favourite book box of 25 selected books for 3-6 year old children
- Data collection by families using photos, survey sheets, interviews.
The hungry caterpillar?

The green sheep?

Minya Bunhii books
HOME VISITS

- First visit
- Invited parents to join the project and sign a form agreeing to provide data
- Survey form of reading habits
- Book selection/choice
- Digital cameras to record children reading
- Box of 25 books provided to homes
My Favourite Book Project

This survey was filled in by,

( ) Mother/Stepmother/Grandmother/Aunty/Female Caregiver

( ) Father/Stepfather/Grandfather/Uncle/Male Caregiver

( ) Other

1. The language spoken at home is
   ( ) English
   ( ) Aboriginal
   ( ) English
   ( ) A Aboriginal language
   ( ) Other/s

2. Does or did your child attend any formal education?(kindy, daycare)
   Yes
   No

If yes then which of the following
   ( ) 2–3 yrs
   ( ) 4yrs
   ( ) 5yrs
   ( ) 6yrs

3. How old is your child? 3yrs
   4yrs
   5yrs
   6yrs

4. Do you or does anyone in your house do any of the following activities with your child/ren?
   Read a book
   Talk about things we’ve done
   Talk about what their child is reading
   Go to the shop and buy a book

5. What language would these activities be done in?
   ( ) English
   ( ) Aboriginal
   ( ) English
   ( ) A Aboriginal language
   ( ) Other/s

6. In a normal week, how much time would you commit to reading at home?
   Less than 1 hr
   1 hr
   1–5 hrs
   6–10 hrs
   greater than 10 hrs

7. How often would you read for enjoyment?
   Daily
   1–2 times a week
   1–2 times a month
   hardly ever

8. How much do you agree with the following statements on READING?
   I don’t do much reading
   only if I have to
   I spend my spare time reading
   reading is an important activity at my home

9. Do you have a “personal library” at home?
   Yes
   No

If yes how big?
   Less than 10 books
   11–20
   21–50
   more than 50

10. How many children’s books?
    Less than 10 books
    11–20
    21–50
    more than 50

11. The highest level of education of parent/s careegiver/s
    Parent 1
    Parent 2

12. How would you describe you financial situation?
    Very well off
    Well off
    Average
    Not very well off
    Struggling

Thank you for your time and effort

Questionnaire adapted from 2006 PIRLS Learning to read SURVEY
SECOND VISIT

Two weeks later

- Collected cameras and had photos developed for the families to use
- Interviewed the parents
- Interviewed the children
- Families kept the books
<table>
<thead>
<tr>
<th>Book No.</th>
<th>Book Title</th>
<th>Tick each time read</th>
<th>Who selected book</th>
<th>Child’s interest level in book (1=low interest and 5=high interest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Possum and Wattle: My Big Book of Australian Words</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Alison Lester’s ABC: starring Alice and Aldo</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>Five Little Monkeys: Over 50 Action and Counting Rhythms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Rocket Countdown</td>
<td>✓</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Dingo Dan</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Tractors</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Kisses for Daddy</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Parsley Rabbit’s Book About Books</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The Night That Marcus Won the Flag</td>
<td>✓ ✓ ✓ ✓</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>Animals: An Indigenous First Discovery Book</td>
<td>✓ ✓ ✓</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>
What do young Aboriginal children want to read???

Which one??

Which one??

Which one??
FINDINGS

- Books in homes
- Dads and reading
- Favourite book
- Interactions reading at home
DADS DO THE READING
My FAVOURITE BOOK

- Children like to read with other people.
- Children like interactive books to talk about.
- Children like electronic literacy
- *Kisses for Daddy* was read 125 times
- Families shared the books 1025 times in 2-3 weeks
Integral was the researchers’ desire to adhere to ideals of ethical Indigenous research at all stages in the research process.

Such research is underpinned by the values of spirit and integrity, reciprocity, respect, equality, survival and protection; and responsibility (NHMRC, 2003).

It is governed by consultation, negotiation and mutual understanding; respect, recognition and involvement; and benefits, outcomes, and agreement (AIATSI, 2000; NHMRC, 2003).
KEY LESSONS LEARNED ABOUT RECIPROCITY AND RELATIONSHIPS

1. Early and regular engagement with families and the wider community ‘paves the way’ for ethical and successful research.

2. Recognition of the role of children and families as researchers strengthens the research process.

3. The Indigenous researcher’s cultural competence allowed him to create a research environment that families wanted to enter. This was especially important with a non-Aboriginal person entering the safe environment and sanctity of the family home.

4. Positively-orientated research engages families. (not crisis or problem focused).

5. Researchers with different foci fosters on-going analysis and a consistent focus on relationships and reciprocity.
SUMMARY – IT’S THE INTERACTION!

- Oral language underpins literacy development
- Phonemic awareness develops in songs and rhymes
- Vocabulary prior to school is related to literacy at year 4 and 7 of school
- Ebooks or traditional storybooks – it’s the interaction
- Family literacy is dynamic and diverse. There is no one-size-fits all
References


More references