This study was designed to explore how 3-year-olds responded to questions about print, reading, writing, and book knowledge. Nine urban black and eight rural white preschoolers were interviewed and questioned about various literacy concepts. They also completed seven print awareness, reading, writing, and book knowledge tasks. The study found that all of the 3-year-olds were able to identify products and labels from their environment, while nearly 75 percent of the responses identified print as the source of the message. All of the children reported being read to and liking it, although most could not answer why people read. Over half of the children wrote letters or symbol-like forms, and the same number were able to differentiate writing from drawing and recognize their own name. Although the children were able to identify a book and were aware that books are read and have pictures and pages, no child said anything about print, words, or letters in relation to books. Most of the children still identified pictures as the source of stories in books. An appendix provides copies of the seven tasks. (Contains 17 references.) (MDM)
Indices of Literacy in Preschool Children

by

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Mid-South Educational Research Association
New Orleans, Louisiana
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Roberta Long

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
INTRODUCTION AND LITERATURE REVIEW

Beginning with case studies of exceptional preschoolers done in the 1960's, most notably Durkin (1966), a growing body of research suggests that the attainment of literacy is a developmental process that begins well before formal instruction. Noam Chomsky's revolutionary work in linguistics provided the theoretical foundation for viewing literacy as developmental. Chomsky's linguistic theories propose that language is a preprogrammed, innately human characteristic excited to unfold by environmental influences. (Chomsky, 1980). Building on Chomsky's linguistic theory, Frank Smith and Kenneth Goodman have both contributed to a psycholinguistic theory of reading. Reading, from the psycholinguistic view, grows from the knowledge a child has of language, and consists of gaining proficiency using cues to construct meaning from print.

Research from four different perspectives: (1) Child's conception of reading and writing, (2) familiarity with books, (3) understanding of print related terminology, and (4) awareness of print, has suggested possible factors that contribute to the development of literacy from its beginnings in the intuitive grasp of language.

Studies of the child's conception of the reading and writing acts indicate that children's understanding of the nature of these processes, and their inter-relation, is based on an intuitive understanding of the language system. Kita's (1979) study of five-year-olds led her to conclude that her subjects understood the reasons for writing much better than reasons for reading. Her writing interviews and samples revealed an intuitive understanding of the nature and purpose of writing. C. Chomsky (1971) and Read (1971) have both concluded that an intuitive understanding of English phonology leads to the development of understanding of the writing process. Downing (1971) concluded that understanding the communicative nature of writing was the first in an interlocking hierarchy of understandings that culminates in the development of cognitive clarity about the nature of reading.

Studies of early and successful readers, beginning with Durkin (1966), have noted that association of reading success with book familiarity. Using the instrument developed by Clay (1972) (Sand Test) Day's (n.d.) study of kindergarten children revealed that book handling knowledge was associated with traditional readiness skills as measured by the Metropolitan Readiness test. Day's study noted that book orientation concepts such as:
- "print carries the message
- left page before right page"

(Step, p.35)

are attained by most children before the kindergarten year.

Fletcher's (1977) study of second graders supports the hypothesis that understanding print-related terminology follows a developmental sequence. She found that "number was recognized more often as a class than letter... (and) word was recognized as a class more often than sentence." (Fletcher, p.11)

Templeton (1980) studied the development of the concept of "wordness" in children aged four through seven. He concluded that understanding the concept of wordness is a slow development related to the level of cognitive functioning and beginning with knowledge of spoken language. Templeton found that the elaboration of wordness as a phenomenon of print was associated with the attainment of concrete operations and began with letter related concepts rather than with sound related concepts.

Trends in the responses of Downing's (1971-72) four and five year old subjects suggest that command of a print-related vocabulary is associated with developing clarity about the nature of the reading process and with reading success. Downing further suggests that acquisition of this vocabulary is a developmental process that begins with discovering the communicative nature of written language.

Studies of print awareness are based on the idea that children begin the reading process naturally in a print-rich environment by discovering for themselves the communicative nature of written language. Ylisto (1977) found that Finnish preschoolers as young as four years could read words that were commonplace in their environment when the words were presented with environmental context. For example, many children in her study could identify words as they appeared in a photograph of a natural setting such as the front of a post office in which the words "Post Office" appeared. Twenty-three of her sixty-two preschool subjects could also recognize some of the same words in isolation from any environmental context. Ylisto also found that older preschool children knew more words, both in context and in isolation, than did younger children. Mason (1977) studied reading readiness skills of four-year-olds and concluded that a hierarchy of capabilities leading to reading begins with recognition of letters and label or sign reading. Mason observed that
word reading begins with those words readily recognized by context.

Reid's (1966) study of first graders suggests that realizing that the print is the primary message bearer is essential before children can make much progress in learning to read. She concluded that having a vocabulary of reading terms such as "word," and "letter" was helpful as children "groped towards" literacy (Reid, p.61).

PURPOSE

This research was designed to build on the work of Yetta Goodman et al., exploring how three-year-old children respond to questions about print, reading, writing and book knowledge.

PROCEDURES

Data gathering techniques consisted of structured interviews to examine young children's awareness of the functions of print, their book knowledge and their concepts of reading and writing.

THE SAMPLE

The sample for the study included nine three-year-old black children (4 boys, 5 girls) from the city of Birmingham, and eight three-year-old white children (3 boys, 5 girls) from Sand Mountain, a rural area of Alabama.

The city children were identified by the public school Parent Coordinator from a group of low income children whose parents were willing to cooperate in the study. Sand Mountain children were identified through contact with two church groups. The socio-economic range of the Sand Mountain children was from lower class to lower middle class.

METHOD

Seven tasks, developed by Yetta Goodman were

1. The researchers appreciate the assistance of Mrs. Clemmie Collins in identifying and interviewing the city children.

2. These tasks can be found in W.T. Fagan, C.R. Cooper & J.M. Jensen (Eds.) Measures for Research in the English Language Arts (vol.2). Urbana, IL., National Council of Teachers of English, in press.
administered to each child. Four tasks were designed to examine the child's response to print with and without contextual clues (print awareness).

Two tasks explored the children's concepts of reading and writing. The final task was designed to reveal children's knowledge of books and print in books.

The city children were brought to the University of Alabama in Birmingham on three Saturday mornings where the interviews were individually administered and video taped. The Sand Mountain children were interviewed on two consecutive days, in local churches. For each task an observer noted verbal as well as non-verbal responses. In addition all interviews were video and/or audio taped for subsequent analysis.

Print Awareness Tasks

The first of the four print awareness tasks, the Object Task, consisted of showing each child realia from the grocery store and other environments; for example, a 2-liter bottle of Coca-Cola, a miniature STOP sign. The Full Color Label Task presented in 2-dimensional form the same color, pictorial and symbolic contextual information as appeared in the Object Task; for example, the label from a 2-liter bottle of Coca-Cola pasted on cardboard and a full color picture of a stop sign. The Black and White Label Task removed all contextual clues except the print face style. For example, Coca-Cola was presented in the familiar cursive print face but in black and white. The Standard Manuscript Task presented the name of each product in regular manuscript style in black print. Each print awareness task was designed to be progressively more abstract (decontextualized).

The following questions were asked for each item in the print awareness tasks:

- What does this say?
- What tells you that it says...?
- What else does it say?
- How do you know?
- What else can you tell me about this?

Concepts of Reading and Concepts of Writing

Concepts of Reading, consisted of questions designed
to gain information about the child's ideas and experiences concerning reading.

**Concepts of Writing** sought information about the child's concepts of writing as well as his/her understanding of print-related terminology. In addition to responding to questions, the child produced a writing and drawing sample.

**Book Handling**

In the book handling interview children were read *The Carrot Seed* by Ruth Kraus (1945) and questioned about their concepts of books and print in books. This task was adapted by Yetta Goodman (1981) from Marie Clay's *Concepts About Print Test* (1979).

**RESULTS**

The responses of the children to all tasks were summarized and are reported below. When appropriate, the results were compared with responses of the three year olds in the Y. Goodman study.

**PRINT AWARENESS**

Reported and discussed in this study are responses to the two questions "What does this say?" and "What tells you that it says...?" Categories used to describe the verbal and nonverbal responses of the children were those developed by Y. Goodman. These categories are shown in the tables and explained in the discussion.

**Object Task**

When children were shown an item and asked, "What does this say?", 109 (40.1%) of the 272 responses were appropriate to the print. (See Table I). That is, they gave the exact name, "Coca-Cola" for Coca-Cola, similar names such as "Coke" for Coca-Cola or a partial response to the print, "Cola" for Coca-Cola.

Sixty (22.1%) of the responses were generic for specific: "drink" for Coca-Cola or "sign" for STOP. A number of responses, 11 (4.0%) referred to a related concept, "toothbrush" for Crest Toothpaste or "beer" for Coca-Cola. Three and seven-tenths percent (10) of the responses indicated the function of the item, "washes stuff" for Tide, "Don't do that" for school crossing. Fourteen responses (6.6%) were non-print related such as...
### TABLE I

RESPONSES TO OBJECT TASK

"What does this say?"

<table>
<thead>
<tr>
<th>Frequency of Response</th>
<th>Appropriate</th>
<th>Genetic for Specific</th>
<th>Parallel</th>
<th>Related Concept</th>
<th>Function</th>
<th>Chaining</th>
<th>Non Print</th>
<th>Print Related</th>
<th>Unrelated</th>
<th>Uncodable</th>
<th>Total Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>109</td>
<td>60</td>
<td>9</td>
<td>11</td>
<td>10</td>
<td>20</td>
<td>18</td>
<td>7</td>
<td>2</td>
<td>26</td>
<td>272*</td>
</tr>
<tr>
<td>%</td>
<td>40.1</td>
<td>22.1</td>
<td>3.3</td>
<td>4.0</td>
<td>3.7</td>
<td>7.4</td>
<td>6.6</td>
<td>2.6</td>
<td>0.7</td>
<td>9.6</td>
<td></td>
</tr>
</tbody>
</table>

*16 questions X 17 children
"yellow" for school crossing, "butter" for grits (responding to the picture). Seven responses (2.6%) were print related, "P" for STOP and "ABC" for Church's Fried Chicken.

Twenty responses (7.4%) suggested that a chain of thought moved from the item to the response. For example, one child responded "road" when shown the stop sign, another said "road" for School Crossing. A frequent response for Oscar Mayer Weiners was "hot dogs" and several children said "hamburger" for McDonalds. These responses were coded as "chaining".

Only 2 responses (.7%) were unrelated to the item. For example, one child said "oatmeal" for Campbell's Tomato Soup. Even there, the relationship could be a food item or a round container. The other non-relationship was the response "something to eat" for School Crossing.

Twenty-six of the responses (9.6%) were uncodable because the child responded "I don't know," shrugged, said nothing, or the response of the child could not be understood.

It is interesting to note that 226 or 83.1% of the total responses for all subjects could be considered as reasonable responses for the first question. This figure includes all responses except the uncodable, the non-linguistically related and unrelated responses. Most of this group of three-year-olds, when shown an item and asked, "What does this say?", did attend to the name of the item.

When asked the second question, "What tells you that it says...?", 54 (23.5%) of the 230 responses were to the print name of the item. (See Table II). The child pointed to the name of the item and a few children said such things as, "this does" or "these letters do". An additional 112 (48.7%) of the responses were to other significant print on the package.

A number of responses, 24 (10.4%) were to the picture of the item rather than the print. A few responses, 12 (5.2%) were directed to the symbol; that is, a child would point to the golden arches instead of the word, McDonalds. Rarely did a child point to the design, color or numbers on a package. Only five responses (2.6%) were in these categories.

Twenty-two responses (9.6%) were coded as "other". These responses included pointing all over the package or,
TABLE II
NONVERBAL RESPONSES TO OBJECT TASK
"What tells you that it says...?"

<table>
<thead>
<tr>
<th>Frequency of Response</th>
<th>Print Label</th>
<th>Print Others (Significant)</th>
<th>Picture</th>
<th>Symbol</th>
<th>Design</th>
<th>Color</th>
<th>Numbers</th>
<th>Other</th>
<th>Total Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>54</td>
<td>112</td>
<td>24</td>
<td>12</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>22</td>
<td>230*</td>
</tr>
<tr>
<td>%</td>
<td>23.5</td>
<td>48.7</td>
<td>10.4</td>
<td>5.2</td>
<td>.9</td>
<td>1.3</td>
<td>.4</td>
<td>9.6</td>
<td></td>
</tr>
</tbody>
</table>

*This number includes all nonverbal responses made by the 17 children.
in the case of the weiners and pinto beans, pointing directly at the object.

In conclusion, 72% of the responses indicate an awareness that the print is the significant factor that identifies an item even when the total context (the package or item) is presented.

Full Color Label Task

Ninety-six (28.2%) of the 340 responses for all subjects to the items presented on task cards were considered appropriate to the print. (See Table III). These responses included exact indentification of the print and similar names like "stop and go" for "STOP." An additional 56 (16.5%) of the responses consisted of generic for specific terms such as "washing powder" for Tide or "gas" for Chevron. Forty-two (12.4%) of the responses referred to non-print information, for example, "red" for Coca-Cola. Thirteen (3.8%) responses referred to the function of the item, for example "washes the laundry" for Tide and "ahead" for School Crossing. Twelve (3.5%) of the responses were parallel names such as "buttermilk" for milk, and eleven (3.2%) were related concepts such as "toothbrush" for Crest or "shampoo" for Baby Powder. Thirteen (3.8%) of the responses were considered to be chaining such as "put on sidewalk" for School Crossing or "more dishes" for K-Mart. Forty-two (12.4%) of the responses were considered print related, for example, trying to name the letters in the words. Twenty (5.9%) of the responses were considered unrelated to the item. Seventy-one (20.9%) of the responses were uncodable because either the child said, "I don't know," or there was no response.

When asked the question, "What tells you that it says...?" 42 (16%) of the 257 responses were directed to the exact print and an additional 98 (38%) to other print on the label. Taken together, this means that 140 (54%) of the total responses were directed to print. The picture, symbol, design, color, number, or other label areas were identified in 102 (40%) of the responses. Seven (3%) of the total responses were directed to two different places on the label such as both the picture and the symbol. Some of the children were not asked this questions because they answered the previous question, "I don't know..." or they had not responded to the previous question.

Responses that referred to print made up 72% of the responses in the Object Task but only 54% of the responses in the Full Color Label Task. This may be accounted for by
TABLE III
RESPONSES TO FULL COLOR LABEL TASK
"What does this say?"

<table>
<thead>
<tr>
<th>Frequency of Response</th>
<th>Appropriate</th>
<th>Generic for Specific</th>
<th>Parallel</th>
<th>Related Concept</th>
<th>Function</th>
<th>Chaining</th>
<th>Non Print</th>
<th>Print Related</th>
<th>Unrelated</th>
<th>Uncodable</th>
<th>Total Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>96</td>
<td>56</td>
<td>12</td>
<td>11</td>
<td>13</td>
<td>13</td>
<td>42</td>
<td>6</td>
<td>20</td>
<td>71</td>
<td></td>
<td>340*</td>
</tr>
<tr>
<td>%</td>
<td>28.2</td>
<td>16.5</td>
<td>3.5</td>
<td>3.2</td>
<td>3.8</td>
<td>3.8</td>
<td>12.4</td>
<td>1.8</td>
<td>5.9</td>
<td>20.9</td>
<td></td>
</tr>
</tbody>
</table>

*20 questions X 17 children
the presence of more concrete cues in the Object Task.

Black and White Label Task

With less contextual support of the print, appropriate responses dropped to 21 (7%) of the responses. (See Table IV). Generic for specific responses dropped to 13 (4.3%). Parallel responses dropped to 5 (1.7%). Non-print responses dropped to 16 (5.3%). Print related responses went up to 28 (9.3%), and unrelated responses went up to 26 (8.7%). There was a sharp increase in uncodable responses to 172 (57.3%). Avoidance responses made up 7% of the total number.

Standard Manuscript

No results are reported for the Standard Manuscript Task. The interviewers discontinued this task because it was apparent that most of the children could not do it or were tired or disinterested.

Comparison of the Object Task and the Label Tasks

The percentage of appropriate responses was much greater when children were shown the actual object or box, than when only the label was shown. (See Table V). Forty and one-tenth percent (109) of the responses were appropriate to the print when the object was shown as compared to 28.2% (96) for the full color labels and 7% (21) for the black and white label. When shown the actual object, 22.1% of the responses were generic for specific as compared to 16.5% of the responses to full color labels and 4.3% for the printed label.

Chaining also was more evident when the object was shown. Seven and four-tenths percent (20) of the responses were coded as chaining for the objects, 3.8% (15) for the full color labels and Black and White Label Task. 7% (8) for the 2.

More non-linguistically related, unrelated and uncodable responses were received from the labels (color and black and white) than from the objects. This indicates that the three dimensional stimulus does contribute to meaning for the child. It may, however, not contribute appreciably to knowledge about print awareness. Although, when asked, "What tells you that it says..." the subjects almost always pointed to the print on the object; 72% (166) of the responses were to the name of the item or other significant print on the package. When asked the same question about the full color labels, 54% (140) of the
### TABLE IV

**BLACK AND WHITE LABEL TASK**

"What does this say?"

<table>
<thead>
<tr>
<th>Frequency of Response</th>
<th>Appropriate</th>
<th>Generic for Specific</th>
<th>Parallel</th>
<th>Related Concept</th>
<th>Function</th>
<th>Chaining</th>
<th>Non Print</th>
<th>Print Related</th>
<th>Unrelated</th>
<th>Uncodable</th>
<th>Total Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21</td>
<td>13</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>8</td>
<td>16</td>
<td>28</td>
<td>26</td>
<td>172</td>
<td>300*</td>
</tr>
<tr>
<td>%</td>
<td>7</td>
<td>4.3</td>
<td>1.7</td>
<td>2.7</td>
<td>1</td>
<td>2.7</td>
<td>5.3</td>
<td>9.3</td>
<td>8.7</td>
<td>57.3</td>
<td></td>
</tr>
</tbody>
</table>

*20 questions X 15 children*
### TABLE V

**COMPARISON OF RESPONSES TO OBJECT TASK AND LABEL TASKS**

in Response to "What does this say?"

<table>
<thead>
<tr>
<th>Task</th>
<th>Appropriate</th>
<th>Generic for Specific</th>
<th>Parallel</th>
<th>Related Concept</th>
<th>Function</th>
<th>Chaining</th>
<th>Non Print</th>
<th>Print Related</th>
<th>Unrelated</th>
<th>Ungradable</th>
<th>Total Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object Task</td>
<td>40.1</td>
<td>22.1</td>
<td>3.3</td>
<td>4.0</td>
<td>3.7</td>
<td>7.4</td>
<td>6.6</td>
<td>2.6</td>
<td>0.7</td>
<td>9.6</td>
<td>272</td>
</tr>
<tr>
<td>Color Label Task</td>
<td>28.2</td>
<td>16.5</td>
<td>3.5</td>
<td>3.2</td>
<td>3.8</td>
<td>3.8</td>
<td>12.4</td>
<td>1.8</td>
<td>5.9</td>
<td>20.9</td>
<td>340</td>
</tr>
<tr>
<td>Black and White Label Task</td>
<td>7.0</td>
<td>4.3</td>
<td>1.7</td>
<td>2.7</td>
<td>1.0</td>
<td>2.7</td>
<td>5.3</td>
<td>9.3</td>
<td>8.7</td>
<td>57.3</td>
<td>300</td>
</tr>
</tbody>
</table>
responses were to the print.

**Comparison Between Full Color Label and Black and White Label Tasks**

The three-year-olds in this study were dependent upon the shape and color of the label. The percentage of appropriate responses dropped from 28.2% (96) to 7% (21) when the print was presented out of context. Generic for specific dropped from 16.5% (56) to 4.3% (13) and the number of uncodable responses dramatically went up, from 20.9% to 57.3%.

**Comparison to Goodman Findings**

In the Alabama study, for the Full Color Label Task and the Black and White Label Task the percent of responses in each category was similar to those for the three-year-olds in the Goodman study. (See Tables VI and VII). The only noticeable difference was in the number of non-print responses in the Full Color Label Task, 25% (18) in the Goodman Study as compared to 12.4% (42) in the Alabama study.

**Summary of Print Awareness Tasks**

The more context supporting the print, the higher was the frequency of appropriate responses. With full contextual support for the print most of these three-year-old children were able to identify names of selected common objects. Most of them also identified print as the source of the message. As the print became more decontextualized the children lost both meaning and interest.

**CONCEPTS OF READING**

Of the fifteen children who responded to the question, "Do you know how to read?" nine said "yes" and six said "no." Nine children said that someone would have to help them learn how to read or learn to read better while four stated that no help would be required. Parents were most often mentioned as the ones who would help them learn. One child stated that she would learn to read, "when I get six." When asked, "Do you want to be able to read (better)?" five children said "yes" while four children said "no."

Ten children reported that learning to read is hard. Only two said that it is easy. No child was able to give a reasonable answer to why s/he thinks reading is easy or hard. Most said simply, "It just is."
## TABLE VI

### FULL COLOR LABEL TASK

Comparison of Responses of Three-Year-Olds to "What does this say?"

Goodman and Alabama Data

<table>
<thead>
<tr>
<th></th>
<th>Avoidance</th>
<th>Appropriate</th>
<th>Generic for Specific</th>
<th>Parallel</th>
<th>Related Concept</th>
<th>Function</th>
<th>Chaining</th>
<th>Non Print</th>
<th>Print Related</th>
<th>Unrelated</th>
<th>Uncodable</th>
<th>Total Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goodman</strong></td>
<td>4</td>
<td>21</td>
<td>18</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>18</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td>72</td>
</tr>
<tr>
<td><strong>Alabama</strong></td>
<td>95</td>
<td>56</td>
<td>12</td>
<td>11</td>
<td>13</td>
<td>13</td>
<td>42</td>
<td>6</td>
<td>20</td>
<td>71</td>
<td>340</td>
<td></td>
</tr>
<tr>
<td><strong>%</strong></td>
<td>5.6</td>
<td>29.2</td>
<td>25.0</td>
<td>2.8</td>
<td>2.8</td>
<td>1.4</td>
<td>5.6</td>
<td>25.0</td>
<td>2.8</td>
<td>0</td>
<td>13.9</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE VII
BLACK AND WHITE LABEL TASK
Comparison of Responses of Three-Year-Olds
to "What does this say?"
Goodman and Alabama Data

<table>
<thead>
<tr>
<th></th>
<th>Avoidance</th>
<th>Appropriate</th>
<th>Generic for Specific</th>
<th>Parallel</th>
<th>Related Concept</th>
<th>Function</th>
<th>Chaining</th>
<th>Non Print</th>
<th>Print Related</th>
<th>Unrelated</th>
<th>Uncodable</th>
<th>Total Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goodman No.</td>
<td>38</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>14</td>
<td>0</td>
<td>72</td>
</tr>
<tr>
<td>%</td>
<td>53</td>
<td>6</td>
<td>8</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>19</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Alabama No.</td>
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<td>13</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>8</td>
<td>16</td>
<td>28</td>
<td>26</td>
<td>172</td>
<td>57.3</td>
<td>300</td>
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<td>%</td>
<td>7</td>
<td>4.3</td>
<td>1.7</td>
<td>2.7</td>
<td>1</td>
<td>2.7</td>
<td>5.3</td>
<td>9.3</td>
<td>8.7</td>
<td>57.3</td>
<td></td>
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</table>
Only one child responded that the people with whom he lives do not know how to read. It is possible that this child misunderstood the question because he went on to say that his parents read to him. The living room was mentioned most often (nine times) as the place where others read in the home. The bedroom was mentioned five times.

Two children reported that they are not read to at home. The twelve children who said they are read to mentioned parents most often as the ones who read to them. Grandparents, brothers and sisters were also mentioned.

All but two children reported that they like being read to. One who said "no" answered, "I just don't" when asked why. The other one who said he does not like to be read to responded, "I like it when I do it myself." He was one who had earlier stated confidently that he already is able to read. When asked what they look at while being read to only four answers were related to the books. These were "books," "words," "paper," and "pages." Other answers were "mama," "T.V.," "my toes," "my box," "I draw," and "I don't know."

Five children reported that they think reading a story and telling a story are the same thing while three said they were different. None of the children could answer how they are the same or different.

To the question, "Can you read with your eyes closed?" ten children said "no," while three answered "yes." Most who said no indicated understanding with such responses as, "I can't look," "I can't see the pages," and "I couldn't see the letters." One child who answered "no" expanded her answer by saying "but I can hear it with my eyes closed."

When asked if they have a T.V., all but one child answered yes. Six children said there are things to read on T.V., but none could explain their answer. Most gave the name of a specific show.

Only two children reported that they do not accompany their parents to the store. Of the eleven children who said they do go to the store, only four said there is anything that they or other people can read at the store. Appropriate things mentioned were a book, magazines, and T.V. Guide. Other responses were, donuts, chewing gum, Sesame Street, a boy, and a girl.

When asked "Why do people read?" most responded "just 'cause," or "I don't know." Two children said that
people read because they like to or want to while one child asserted, "They read to their kids because they want to."

Summary of Concepts of Reading

More than half the children in this study stated that they already know how to read. Most think that learning to read is hard and that somebody will have to help them learn. These findings are consistent with those from the Goodman study except that most of the Goodman's three year olds stated that they do not know how to read. Most children understood that you cannot read with your eyes closed, but were not aware that there are things to read on T.V. and at the grocery store.

CONCEPTS OF WRITING

When the children chose paper for writing, thirteen of the seventeen selected unlined paper, and four selected lined paper. Twelve children selected markers, three chose pencils, two selected crayons, and none selected pens.

Over half of the children (11) made either recognizable letters or symbol-like forms. The remaining subjects made undifferentiated scribbles (4) and pictures (2).

The children did not seem to know why they chose the writing paper and instruments. Three subjects gave no response when they were asked why they chose them, and the others made comments like these: "just 'cause," "I just did," "I wanted to," "I don't know," and "it's my favorite color."

When asked to read what they had written, about half of the children (9) responded appropriately by "reading" or naming what they had written. For example, they said "That's my name," "Jill Bailey," or "That says Heath and I'm that old." The other children (8) gave no response or made unrelated comments such as "there," "come from Burger King," or "this, this, this, this."

In telling what they wrote, about half of the children (9) responded appropriately. For instance, they made comments such as "desk," or "a, b, c." The other children (8) gave no response or made comments such as "right there," or "this, this, this, this."

When asked to write a letter, most of the children (11) wrote a letter or a symbol-like form. One child wrote a number. The other five children made scribbles.
In responding to the question, "What do you write at home?" about half (9) of the children responded appropriately. For example, one child said, "my name," and another child said, "a,b,c." The other children (8) either did not respond or made comments such as "a house," or "right there."

When asked, "What do you write in school," almost half of the children (7) made appropriate comments such as "I wrote nothing,", "I don't know,", or "my a,b,c's." Seven children made comments such as "right there," "pictures," or "a man." Two children gave no response to the question.

Children gave a variety of reasons about why people write. Two children said because they like to or want to, four said they didn't know, and two made no comment. The other nine children made a variety of comments such as: "teacher tells them to," "they want to show their names," "they make baby dolls and kitty cats," "they say to be quiet," "1,2,3,4,5," "a lady," "because," "my brother does," and "what they want to."

When children were given a choice of lined and unlined paper and were asked to draw a picture, almost all of the children (15) chose unlined paper and only two children chose lined paper. When they were given the opportunity to select their drawing instruments, most children (12) selected markers. Only four children chose pencils and only one chose a crayon.

When asked to draw a picture, only a few of the children (3) drew a picture. Another six children drew symbol-like forms, one made a recognizable letter and seven children drew only scribbles.

Most (13) of the children's responses to the request of "show me writing" were incorrect. More than half (10) of the children's responses to the request "Show me what you drew" were correct.

When asked if drawing is the same as writing, most of the children (11) gave responses which revealed that they did not differentiate between writing and drawing.

In response to "Is drawing the same as writing?" over half of the children (10) said yes. When asked how they were similar, children's responses included these: "yes," "same thing," "don't know," and "no." When asked how drawing and writing were different, children's responses included these: "the same," "no," "don't know," and "yes."
Children were shown eleven different items of writing and two different items of pictures. Six of the children said all of the items were writing. Apparently these six children could not differentiate between writing and drawing. About half of the children correctly identified the two items of drawing and the eleven items of writing. Thus, it seems that these three year old children have begun to differentiate between drawing and writing. When asked to find his/her own name, most children (11) chose his/her own name.

**Summary of Concepts of Writing**

More than half of these three-year-old children (11) made either recognizable letters or symbol-like forms, and about half of them were able to "read" or name what they had written. By contrast, Goodman reported that none of her three-year-olds produced any letters, words, or symbols.

Four children were able to identify writing and ten were able to identify drawing. Only one three-year-old in the Goodman study was able to identify drawing as opposed to writing.

Seven children in the present study indicated that drawing and writing are not the same. Two of the three-year-olds in the Goodman study indicated a difference between writing and drawing. Interestingly, all of the children had difficulty explaining the difference between drawing and writing.

**BOOK HANDLING**

Twelve of the seventeen children used the word "book" when asked "What is this called? What is this thing?" When asked "What do you do with it?", eleven children replied "read it," two said "look at it", leaving only four inappropriate responses. When asked what was inside the book, thirteen referred to the picture on the cover, "a boy," or said "pictures," "pages," "paper." There were no answers that referred to the print, although one child said, "you read it."

When asked to identify the front of the book nine children correctly pointed to the front. Four of the seventeen children pointed to the back cover and four to other pages. All the children appeared to be aware of the meaning of the term "page."

When asked by the interviewer "Can you read this to
five children responded negatively, eight pointed to the picture and named it. One child said yes and "read" some words unintelligible to the researcher. One child pointed to the print.

When asked where to begin reading twelve children pointed to the picture. Only five children pointed to the print, though not always at the beginning of the paragraph. Most of these three-year-olds do not have an awareness of the role of print in books.

Seven children could clearly identify the top and the bottom of the page. When the book was presented upside down and the child was asked "Can I read this now?" nine of the eighteen children responded no or turned the book right side up. (It seems possible that some children might have interpreted the question as asked by one interviewer to mean "should I read it now?"). At least half of these three-year-olds recognized the need to turn the book right side up for reading.

To ascertain if children knew print related terminology the interviewer asked the children to identify one letter, two letters, one word, two words, the first letter of a word, the last letter of a word and a capital letter. Fourteen children were unable to respond correctly to these questions. Only three children responded correctly. It seems clear these three-year-olds do not yet have the concept of letters or words.

None of the children seemed aware of title or authorship in relation to the book.

When asked to "tell something about the story" nine of the children responded with information about the story (some required prompting.) Four children made up a story and four did not respond to the question.

As in the Goodman study, three-year-olds emphasize pictures rather than print and are generally not aware of the function of print in books.

**SUMMARY AND CONCLUSIONS**

The three year olds in this study were able to identify products and labels from their environment. Almost 3/4 (more than half) of the children's responses identified print as the source of the message. When the task provided less contextual support, only about 15% of the responses were relevant to the print.
These three year olds reported being read to and liking it. Most could not answer "Why do people read?" They were not aware that there are things to read on TV and at the grocery store.

Over half of the children wrote letters or symbol-like forms. The same number were able to differentiate writing from drawing and to recognize his/her own name.

Although these three-year-old children are able to identify "book" and are aware that you read it and that it has pictures, pages, etc., no child said anything about print, words or letters. Most of these children still identify pictures as the source of stories in books. For the most part they do not have the concept of letters and words in regard to print.

Half of the children were able to report, at least in part, the contents of the story.

Three year olds show signs of emerging into reading. They construct meanings from the labels and symbols in their environment; they are acquainted with the function of books and, to some extent, how they are handled. These findings support the concept of a developmental process in which children as young as three are learning about print, writing and books from their environment.

Interviewing these same children at four years is planned in order to observe their growth toward literacy and to compare the results with those of the four year olds in the Goodman study.
BIBLIOGRAPHY


Templeton, Shane. "Young Children Invent Words: Developing Concept of 'Word-ness.'" Reading Teacher 33 (1980): 454-59.

APPENDIX

Copies of Tasks
*PRINT AWARENESS OBSERVER FORM*

Observer should indicate all verbal and non-verbal responses

NAME of child ___________________________ SEX: _______ Date _______
AGE of child (years & months) ___________________________

**MCDONALDS**

1. What does this say?

________________________________________________________________________

2. What tells you that it says...?

________________________________________________________________________

3. What else does it say?

________________________________________________________________________

4. How do you know?

________________________________________________________________________

5. What else can you tell me about this?

________________________________________________________________________

*Adapted from Yetta Goodman

**Select items advertised on popular children's television shows, and from business and street signs in the local area.
PRINT AWARENESS ITEMS

These items were selected from popular children's television shows, and from business and street signs in the Birmingham area.

*Barber's Milk
*Campbells Soup
Chevron
*Churchs Chicken
*Coca Cola
*Corn Flakes
*Crest
*Grits
*Ivory
*Johnson's Baby Powder
K-Mart
*Kool-aid
*McDonalds
*Oscar Mayer
*Pinto Beans
*School Crossing
*Sesame Street
*Stop
Telephone
*Tide

*Objects used for Task A
CONCEPTS OF READING

Observer's Sheet

Each subject will be interviewed to determine his/her concepts about and attitudes toward reading. This task will aid in understanding the perceptions young children have about the function of reading and the reading act itself. Interviewers should encourage as much discussion as possible in response to these questions. The observer should record all non-verbal behavior.

**NAME of child:** __________________________ **Sex:** ______ **Date:** __________

**AGE of child (years & months):** __________________________ **Time started:** __________

**NAME of interviewer:** __________________________ **Time ended:** __________

**NAME of observer:** __________________________

1. Do you know how to read? ____________________________________________
   (if "yes" on #1, ask:)
   a. How did you learn how to read? ______________________________________

   b. Did somebody help you to learn? (if yes, who?) or did you learn by yourself?

   c. Do you like to read?

   d. What do you like to read? __________________________________________

   (if "no on #1, ask:)
   e. Do you want to be able to read?

   f. How will you learn to read? ______________________________________

   g. Does someone have to help you learn how to read?

   h. Who do you think will help you learn how to read?

* From Yetta Goodman
2. Is it possible to learn to read by yourself?

3. Is learning to read easy/hard?

4. Why do you think learning to read is easy/hard?

5. a. Do the people you live with know how to read?

b. What do they read?

c. Where do they read? (kitchen, living room, etc.)

6. a. Do they ever read to you?

b. Who?

c. What do they read?

d. Do you like it?

e. Why?

7. What do you look at while you are being read to? (probe with "Anything else?")

8. a. If I said "I'm going to read you a story", what would I do?

b. If I said "I'm going to tell you a story", what would I do?
c. Are reading a story and telling a story the same or are they different?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

d. How?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

9. a. Can you read with your eyes closed?

________________________________________________________________________

b. How?

________________________________________________________________________

10. a. Do you have a T.V.?

________________________________________________________________________

b. Is there anything to read on T.V.?

________________________________________________________________________

(Try to get at books, magazines and newspapers, and labels without using those words. If not, ask directly about them.)

11. a. Do you ever go to the store with your parents?

________________________________________________________________________

b. If yes, is there anything in the store that you read or people can read?

________________________________________________________________________

c. What?

________________________________________________________________________

12. Why do people read?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

13. Do you speak a language?

________________________________________________________________________

________________________________________________________________________

14. What do you speak?

________________________________________________________________________
Child's Concepts of Written Language and Pictorial Representation

This task will provide information regarding young children's concepts about writing as well as their use and understanding of print-oriented terminology. Subjects will also be required to write and draw and then react to their productions. The subjects will have available to them a variety of writing and drawing materials such as colored and white paper, lined and unlined paper, crayons, pencils, marking pens, etc. The degree to which the child's choice of materials varies according to the task will be noted.

Procedure:
1. Offer materials to subject and explain what they are.
2. Ask the child to respond to the questions on the Task 5 questionnaire.
3. In order to identify the response with the appropriate question, mark each written response of the child with the appropriate question number. Also, if the child reads what is written, record what the child claims it says on sample.
4. Record verbal responses on tape recorder. Try not to let the recorder interfere with the interaction between you and the child. Observer must record all nonverbal behavior.

NAME of child: __________________________ Date: ______________
AGE of child (years & months): __________________________ Sex: ______________
NAME of interviewer: __________________________

(Have available lined paper, unlined paper, pencil, pen, magic marker and crayon in front of child.)

1. a. Write for me. (If no response, say "Pretend to write for me.")

b. Why did you choose those? (paper and writing implements)

2. a. Read me what you wrote.

b. If child says "I can't" ask "Why not?" and then say "Pretend to read."

3. Tell me what you wrote. What's this and this? (Get at terms word, letter, etc.)
4. Write me a letter.

5. a. What do you write at home?

b. Do you write at school?

c. What do you write at school?

6. What do you write?

7. Why do people write?

8. (Offer materials again)
   a. Draw me a picture

b. Why did you choose those?

9. a. Show me your writing.

   b. Show me your drawing.
10. (Make sure child has sar -es of both his writing and drawing in front of him.)
   a. Is drawing the same as writing?

   b. How are they similar?

   c. How are they different?

11. Show child a variety of writing samples (manuscript, cursive, words written in language other than English, a single letter, reoccurring letters, and non-writing samples such as simple drawings and geometric shapes). Ask child to identify which of the samples represent writing.

12. Write three different looking names including the child's and ask him to read his name and point to it.
Book Handling Knowledge Task

Subjects will be presented with a book and asked to read for the researcher. If the child cannot read or refuses to read, the book will be read for the child by the researcher. During the reading, the Book Handling Knowledge Task will be administered. Developed by Y. Goodman and B. Altwerger, it is an adaptation of the work of H. Clay (1972) and D. Doake. This focuses on directionality, use or understanding of terminology such as page, letter, word, and concepts regarding the source of the language.

Procedures:

1. Take a picture storybook that is suitable for reading to a pre-school child.
2. Make sure that the book has a title page which includes the title of the book and the author's name.
3. Make sure that the pages have clear, bold print and that there are many pictures in the book. If possible, there should be a page with print on one side and picture on the other.
4. If you are right-handed, sit with the child on your left side, and vice versa if you are left-handed.
5. Interactor should try to eliminate teacher role influences. Try not to give child too much information or direction toward print.
6. If the child has trouble with the "curtain," use a pointer (pencil, pen, etc.) instead.

NAME of child: ___________________________ Date: ___________________________

AGE of child (years & months): ________________ Sex: ________________

NAME of interviewer: ___________________________
<table>
<thead>
<tr>
<th>Item</th>
<th>Administration</th>
<th>Instruction</th>
<th>Response</th>
<th>Child's Response</th>
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<tbody>
<tr>
<td>1</td>
<td>Show book; title covered by hand. Flip over pages</td>
<td>&quot;What's this called?&quot; &quot;What's this thing?&quot; If child answers with the name of the book, record and ask &quot;What's (say name of book given by child)</td>
<td>&quot;Book&quot; &quot;Story Book&quot; &quot;Story&quot; Name of book</td>
<td></td>
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<tr>
<td>2</td>
<td>Displaying book.</td>
<td>&quot;What do you do with it?&quot;</td>
<td>&quot;Read it&quot; &quot;Look at it&quot; &quot;Tell it&quot; &quot;Open it&quot;</td>
<td></td>
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<tr>
<td>3</td>
<td>Displaying book.</td>
<td>&quot;What's inside it?&quot;</td>
<td>&quot;Story&quot; &quot;Picture&quot; &quot;words&quot; &quot;pages&quot; &quot;letters&quot; &quot;things&quot;.</td>
<td></td>
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<tr>
<td>4</td>
<td>Present book wrong way up and back towards S.</td>
<td>&quot;Show me the front of this book&quot; &quot;Take the book and open it so that we can read it together</td>
<td>Any indication of front or first page</td>
<td></td>
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<td>Item</td>
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<td>Instructions</td>
<td>Response</td>
<td>Child's Response</td>
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<td>5</td>
<td>Turn to page 3</td>
<td>Hold on to a page and say &quot;Show me a page in this book&quot;, &quot;Is this a page?&quot;.</td>
<td>Give the book to child.</td>
<td>Point to page &quot;Yes&quot;</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>&quot;I'm going to read you this story. You show me where to start reading.&quot; &quot;Where do I begin?&quot;</td>
<td>Read this to me.</td>
<td></td>
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<tr>
<td>7</td>
<td></td>
<td>If child doesn't read the book or does inappropriate book reading continue: Give the book to the child. Read the first page.</td>
<td>If child doesn't read the book or does inappropriate book reading continue: Give the book to the child. Read the first page.</td>
<td></td>
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<tr>
<td>8</td>
<td></td>
<td>Turn to next page.</td>
<td>&quot;Show me the top of this page&quot;, &quot;show me the bottom of this page&quot;.</td>
<td></td>
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<tr>
<td>Item</td>
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<td>Child's Response</td>
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<td>9</td>
<td>Show the page to the child.</td>
<td>&quot;Show me with your finger exactly where I have to begin reading&quot;.</td>
<td>Points to the first word on the page.</td>
<td></td>
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<tr>
<td>10</td>
<td>Show the page to the child</td>
<td>&quot;Show me with your finger which way I go, as I read this page&quot;.</td>
<td>Left to right, on the page.</td>
<td></td>
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<tr>
<td>11</td>
<td>Continue to show the page to the child</td>
<td>&quot;Where then?&quot; (This may already have been done or stated in #9, if so credit but do not repeat.)</td>
<td>Top line to bottom line.</td>
<td></td>
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<tr>
<td>12</td>
<td>Read the page.</td>
<td>&quot;You point to the story while I read it.&quot; (Read slowly)</td>
<td>Exact matching of spoken word with written word.</td>
<td></td>
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<th>Instructions</th>
<th>Response</th>
<th>Child's Response</th>
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<tbody>
<tr>
<td>13</td>
<td>If there is print on both pages display the pages.</td>
<td>&quot;Where do I go now?&quot;</td>
<td>Points to the first line of print on the next page.</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Read the next two pages: If possible turn to a page with print and a picture on it. Turn the book upside down without the child seeing you.</td>
<td>Can you or I read this now? Why or why not.</td>
<td></td>
<td></td>
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<tr>
<td>15</td>
<td>Show S how to use masking card to close the &quot;curtains&quot; over the &quot;window&quot;. (Use two pieces of black cardboard).</td>
<td>&quot;Let's put some of the story in this window. I want you to close the curtains like this until I can see just one letter.&quot; &quot;Now just two letters&quot;.</td>
<td>One letter correct Two letters correct</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Open &quot;curtains&quot;</td>
<td>&quot;Now close it until we can see just one word.&quot; &quot;Now just two words.&quot;</td>
<td>1 word correct 2 words correct</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Administration</td>
<td>Instructions</td>
<td>Response</td>
<td>Child's Response</td>
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<tr>
<td>17</td>
<td>Open &quot;curtains&quot;</td>
<td>&quot;Show me the first letter in a word - any word.&quot;</td>
<td>First correct&lt;br&gt; Last correct</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Remove card</td>
<td>&quot;Show me a capital letter - any capital letter.&quot;</td>
<td>Points clearly to a capital letter.&lt;br&gt; Points to any capital letter.</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Read to end of story. Close book and pass it to the child.</td>
<td>&quot;Show me the name of the book&quot; or &quot;Name of story?&quot;</td>
<td>Cover, fly-leaf or title page.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Get at comprehension</td>
<td>&quot;Tell me something about the story.&quot;</td>
<td></td>
<td></td>
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<td>Item</td>
<td>Administration</td>
<td>Instructions</td>
<td>Response</td>
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<tr>
<td>21</td>
<td>Leave the book with the child.</td>
<td>&quot;Show me the beginning of the story.&quot; &quot;Show me the end of the story.&quot;</td>
<td>Opens book to first page and points to the first line. Turns to last page and points to the last line.</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Title page pointing</td>
<td>&quot;It says here (Read title of the book) by ...(Read the author's name). What does by ...(say author's name) mean?&quot;</td>
<td>&quot;He wrote it.&quot; &quot;He made up the story.&quot; &quot;He made the book.&quot;</td>
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