A study demonstrated that young children who have difficulty with phonics can be taught to read through other methods, that phonics is only one of the many useful strategies that a child can employ, and that many contextual strategies are easier to learn and more reliable than phonics. A case study was conducted during an intervention with a young child who was identified as being at-risk of reading failure. The approach used was a series of successive steps. Stage 1 was word-collection; i.e., broadening the little girl's repertoire of known words by focusing her attention on print in the environment. Stage 2 involved generating sentences with words that she recognized. Stage 3 involved the creation of homemade books using sentences which she had already successfully read. Stage 4 was called "real reading for a reason," with books divided into three groups: books the child knew by heart; books she was familiar with but had not memorized; and books that were completely new to her. As a result of the study, certain truths seem evident: (1) print awareness should precede phonics instruction; (2) phonics should be implemented on a need-to-know basis; and (3) when phonics is used, other strategies should be equally emphasized. It is too often the practice that the child is remediated to fit the method, whereas it is the conclusion of this study that the method should be adapted to fit the child. (Fifteen references are attached. The appendix consists of transcripts of 11 slides, including a list of readiness behaviors, sample writing and writing materials from the study, an outline of the four-stage process to examples.) (NG)
Strategic Word Attack:
Acquired Contextual Strategies
in Young Readers

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Northern Rocky Mountain Educational Research Association

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In an April, 1985 article in *The Reading Teacher*, Dr. P. David Pearson stated:

For better or worse, at least if one regards available instructional materials as a barometer of practice, the issue of early reading seems settled with most commercial programs teaching phonics early and intensively. . . I mean neither to celebrate or condemn the broad issues; rather, I only make the observation that broad consensus frees psychic energy to examine other issues (p. 724-725).

Research into the process of reading has brought much new information to light in recent years. We now know that reading is not simply the decoding of letter sounds or identification of words learned by rote. It is a process of constructing meaning from print, and requires the use of all the reader knows about the context of the material, the structure of the sentences, and English syntax (Weaver, 1988).

Fortunately, Dr. Pearson's attitudes are not shared by all. Phonics instruction is no more a settled issue than is ability grouping. The belief that broad practice implies the settlement of an issue is equivalent in many ways to the argument, "We've always done it this way."

Among those who question the wisdom and effectiveness of intense phonics instruction in initial reading programs is Dr. Marie Carbo (1986). Her research has led her to the belief that there are three types of readers. The first are those who learn quickly and easily through phonics instruction. The second are those who CAN learn to read through phonics instruction, but may be better served through other approaches. The third are those who are
unable to make sense of reading as it is taught through phonics instruction. In a very dedicated phonics classroom, those children would most probably comprise the three reading groups. The least successful phonics learners would likely be labeled and remediated, not necessarily to read better, but to learn phonics.

The following study demonstrates that young children who have difficulty with phonics can be taught to read through other methods, that phonics is only one of the many useful strategies that a child can employ, and that many contextual strategies are easier to learn and more reliable than phonics.

BACKGROUND

The study was made during an intervention with a young child who was identified as being "at risk" of reading failure. She was initially instructed by phonics methods, then word family methods. Word family methods involve the use of rhyming words. The child is taught a sound pattern and reads sentences with that pattern repeated with changes in the initial grapheme. For example, the child is taught the sound pattern represented by AT and is asked to read sentences such as, "Nat the fat cat sat on Pat the rat." Phonics was practiced with cards bearing the symbol. The child was directed to identify the sound for which the symbol stood.

Both these methods met with failure to the point of tears and frustration. The child seemed unable to recall the letter-sound correspondences from one day to the next.
and had little success identifying learned letter patterns. She was only five years and ten months old and enrolled in kindergarten, but she had already begun to develop a failure orientation.

This was seen as rather curious. The child had a sophisticated oral vocabulary at a very young age. She was read to often and had a large library of favorite books that she could recite from memory. She often engaged in "reading-like behavior" (Ganschow, Weber & Suieter, 1984), pretending to read to her dolls and stuffed toys. Also, she had directly communicated her desire to learn to read. Her frustration and rapidly deteriorating interest in learning to read alerted the intervention.

**READING READINESS**

The first task was to determine her readiness. One might be inclined to offer an argument about "developmentally appropriate practice" so be assured that readiness was indeed observed. As it is generally understood, readiness is the internalization of certain skills and concepts such as matching letters to sounds, tracing letter shapes, observing differences between shapes or designs, identifying incongruous details in pictures and other visual discrimination tasks (Rubin, 1982). These types of skills are certainly useful, but they are certainly not reading. For the purposes of this study, "readiness" was understood as a knowledge of print concepts and was observed in three areas. The first was the knowledge that print elements are discrete units. The second was the
knowledge that print has certain directional attributes. The third was the symbolic nature of print (Slide 1).

These are the same skills proposed by the taxonomic linguistic approach to reading instruction, which Mosenthal (1989) called reading's first system. The underlying premise is that, in order to fully understand a language, one must understand the features of the sound-symbols, the symbols themselves, the features of the sounds they represent, the relationship of sounds within a morpheme, the syllabication of words and so forth. The linguistic hierarchy became the sequence for initial reading instruction.

Although taxonomic linguistics may be an effective way to study the features of a language, it is not the way that children learn to speak their mother-tongue. Speech is learned naturally in a setting where the language is modeled purposefully and the child's proximal development is respected and encouraged. This same approach can be used to teach the readiness skills necessary for successful reading.

A principal readiness skill is the knowledge that letters are sound symbols. The child demonstrated this understanding in her invented spellings which often accompanied her art (Slide 2).

There is clear evidence in this example of a number of awarenesses. She knew at this point that print "moves" from left to right and top to bottom. She had developed her own simple system of letter-sound correspondences, and she knew that she could record her thoughts and words in symbolic
form. She had come to a point that Halliday (1978) described as readiness.

There comes a time when what he [a child] wants to be able to do with language, the acts of meaning he wants to perform, can no longer be achieved by speaking and listening alone; and from this point on, reading and writing will make sense to him. A child is "ready" for the written medium when he begins to use language in the ecological settings to which writing is appropriate (p. 206).

Such was the case for this child. Far from being at risk, she had engaged in writing and reading behavior for some time. One of her first realizations was that, in order to communicate with her grandmother, who lived many miles away, she would need a way for her messages to travel over time and distance. This realization was hardly spontaneous. Her first writings were scribbles, followed by scribbles with discrete letter-like shapes, followed by real letters without sound correspondence and proceeding finally to messages with clear letter-sound correspondence.

Her invented spelling was one way by which readiness was determined. Another was her reading-like behavior. She had memorized a number of her favorite books by hearing them read over and over. She would recite these books in reading play. This behavior indicated that the child understood the functions of print.

A third area of readiness was her oral vocabulary (King, 1985). Put simply, her use of sophisticated speech meant that there were fewer words that would be unfamiliar to her in her reading, and the peculiar phrasings sometimes found in book language would be less problematic.
Finally, there were a number of words the child already knew how to read and spell which she learned through interacting with them in her environment. She knew how to read and write the words TO and FROM by constantly requesting them for birthday cards and gift tags. She knew how to spell and read PLAY and STOP, because being a child of the '80's, she often used those buttons on her family's VCR. She also knew the word SCHOOL, her own name, her parents' names, PUSH and PULL from the doors of retail establishments and several other words frequently seen on traffic signs and board games.

These awarensses and behaviors led to the conclusion that the child had come to an appropriate level of readiness. An approach was designed which made use of her strengths and which de-emphasized phonetic sounding, which she avoided as one might avoid an open flame.

**THE INSTRUCTIONAL APPROACH**

The approach was a series of successive steps (Slide 3). The first task was to increase the child's print attendance. She was what Holdaway (1979) called an "over-predictor." While being read to she attended to pictures and used them as memory cues when reciting. She did not attend to print.

**STAGE I** was word-collection. Her repertoire of known words was broadened by focusing her attention on print in the environment. She had learned colors in much the same way, by responding to requests to "Find something white" or by responding to the question, "What color is that?" She
learned a number of words in a similar way. For example, she read BACK TO SCHOOL SALE, PARK, MAIL, WALK, DON'T WALK, etc.

STAGE II was The Sentence Generator as described by Holdaway in his 1979 book Foundations of Literacy. The words she had learned in stage one, and others which she already knew were written on large cards and manipulated into sentences. These were never "flashed" out of the context of a complete sentence. Her early sentences were simple ones such as "I love Mommy", and "I go to school." Eventually she was so quick that she would read the sentence as it was being formed, so sentences were written on paper instead (Slide 4).

These are some sentences from an evening when her mother worked with her. They are disconnected, but in most cases there was a context which was meaningful to the child. Within a few weeks the child was reading sentences like "Mom can pick the red apple from the big, green tree." By that time STAGE III had begun.

STAGE III was Homemade Books (Slide 5). Sentences the child had already successfully read were written on half sheets of typing paper and bound into construction paper covers. They were organized into a story of sorts and the child read them. After a successful reading, the child was invited to illustrate the books, which provided another opportunity to practice the text silently.

The child had been quite successful to this point and had enjoyed the "games" very much. She did not, apparently,
STAGE IV is called Real Reading for this reason. The approach to real books was also a series of successive steps. The books were divided into three groups. The first group was made of those books the child had memorized. Because her memory was cued by the pictures, she was directed to point at each word as she said it. Although very close, her memory was not infallible (Slide 6). One of her favorite books was a simple story called *All Fall Down* (Goldsmith, 1983). She made one miscue while reading this book into the recorder. The miscue was caused by a number of factors. First, BUNNY was the child's oral word for that animal. Second, there was an alliteration of B that had been established in the text. Finally, she had read the word that way many times while playing at reading. When finger pointing, however, she said BUNNY and obviously realized the graphophonetic dissimilarity between what she said and the symbol to which she was pointing. Although she didn't know it, she was using phonics to disconfirm a prediction. She did this without direction or encouragement, and that is why the term "acquired strategy" is used.

After reading a number of books in this way, and seeing her list of successfully read books grow longer, the child began to develop a sense of herself as A Reader. The next group of books was comprised of those which the child knew
well, but had not memorized (Slide 7). One such book was *Goodnight, Moon* (Brown, 1975). The child miscued twice in this short passage of a significantly longer book. The first miscue was a phonetic prediction for which she had no strategy to disconfirm. She did not understand that the sentence was continued on the next page and attempted to make a meaningful ending. The second miscue was the omission of the frighteningly long word "whispering". The words "quiet" and "hush" must have cued a prediction which she verified by a quick phonics sampling.

These books were somewhat harder, and care was necessary in choosing them. She would easily become frustrated and wish to give up if a book offered too many obstacles. She was able to read a large number of such books, however, and the growing list of successes added to her confidence. She was willing to risk unfamiliar text.

The third and final group of books was comprised of those the child had never heard before. The first of these were predictable books such as *In a Dark, Dark Wood* and *Hello, Great, Big Bullfrog*. These were chosen with great care, because her confidence was extremely fragile.

This is a complete typescript from one such book (Slide 8). She miscued only three times because most of the words were familiar, predictable from the illustrations, or predictable from context and syntax. The child was interviewed about her successful reading of the text. At first, she was reticent to admit that she had not "sounded it out" but after repeated assurance that her strategies
were acceptable, she admitted to a variety of "sins."

She admitted that she "guessed" the word ROUND. There was no apparent pause, but she said she just assumed that it must be round because of the picture. She made a partial miscue on SQUARE and said that she wasn't sure if it was a "food word" or a "shape word." She sampled the phonetic features of the word and predicted SQUARE because none of the foods in the picture had a name with that sound, but they were all the same shape.

Something similar was applied to TRIANGLE, a word she would not have been able to sound out. She said, "It starts with /t/ and 'triangle' is the only shape that starts that way." She admitted that she read WATERMELON from the picture, because no shape starts with /w/.

The misarticulation of "kirkle" for CIRCLE was a phonetic prediction which she disconfirmed because it wasn't a real word and didn't name a shape or a food. This was the first time the word appeared. Earlier the phrase "round things" had been used.

**DISCUSSION**

The child acquired these strategies almost as survival skills to avoid the use of phonetic sounding which she found to be tedious and unreliable. She had that strategy available, but used it only as a last resort. She was able to predict and confirmed her prediction based on theme, sentence context, syntax, picture clues and prior knowledge. She often used phonics sampling as a prediction strategy and compared the prediction to context, syntax, or semantics for
confirmation. Also, she would make a prediction from context, syntax or theme and use phonetic sampling to confirm it. She very rarely sounded out an entire word.

The array of strategies and applications is an intricate and confusing one. It is not possible to describe all the combinations of prediction and confirmation strategies she was able to employ. It would be extremely confusing to try to list them on a scope and sequence chart for direct instruction, but they CAN be taught.

Suppose for example, that the child had stopped and said nothing when she came to the word TRIANGLE. What would she be waiting for? I have interviewed children using the Burke Informal Reading Interview (1987) and have collected a variety of responses to this question. Among them are "Skip it", "Wait for the teacher to tell me", "Try to sound it out", "Wait for another kid to whisper it."

We teach such strategies by our tendency to allow them. Useful strategies can be taught in much the same way (Slide 9).

In this exchange the child is encouraged to predict from the theme, verify by the initial sound, and digress in the text to reconstruct the meaning. Consistent and unwavering attendance to the teaching of strategies will eventually cause the child to understand that no answer will be supplied and provide the opportunity to acquire an array of contextual strategies to use in constructing the meaning of a text.
Note that phonetic sounding is only necessary in oral reading of unfamiliar text. It is entirely possible that in silent reading, a reader could hazard a guess at pronunciation and continue without ever saying the word correctly (Slide 10).

Consider this word. It is difficult to pronounce with any assurance of accuracy. One would be unable to offer even the simplest definition of the word or a guess at the part of speech. Seen in context, however, one is able to give the part of speech, the meaning and even a rough estimate of the size of the thing. It must be a noun because of its syntactic placement. It must be a stringed instrument if one has a schema for "Things Which Are Strummed" (Devine, 1986). And it must be portable, at least more so than a grand piano, since the boy managed to move it to the tree. It is possible to make this meaning without ever saying the word correctly. It is very possible that the need may never arise again.

This kind of meaning making is not outside the capability of a young reader. The child in this study was given these sentences to read, then interviewed about the sense she made of the sentence. She too was able to make meaning for the unknown word, even though an accurate pronunciation was difficult.

She had a schema for "Things Used To Make Juice" and was able to assume it was a noun: she called it "something." She confused the word with another she vaguely
remembered, but excluded that as a possibility because it did not fit the "Juice" schema. Put simply, she knew it was a fruit, even though she could not pronounce it with any assurance of accuracy.

Context is a useful strategy for predicting pronunciation as well. Near the end of the study the child was shown a series of 24 word cards. The child was asked to read the words and was not told whether her responses were correct or incorrect. She correctly called 17 of the 24 words. Those she called incorrectly are seen on this table (Slide 11).

Several days later the child was asked to read these sentences. She was able to read all the words that she had called incorrectly before, because she had the context available to disconfirm inaccurate pronunciations. When the words were shown in isolation however, she "guessed." This is often the method used for drilling "sight words". If one were a phonics advocate, one might think the child was in need of phonics practice after the first test. The question to be answered is not whether the child possesses a mastery of phonics, but whether she needs to master phonics to read (Carbo, 1987). It seems clear that this child did not.

CONCLUSIONS

It may be speculative to make generalizations from a single case study, but it seems reasonable to assert that this child is not startlingly unique. It is believed that many children who exhibit early frustration with phonics can
be taught to read in other ways. The method used in this study was specific to the child's strengths, and in that respect, she is unique. However, certain truths seem evident.

1) **Print awareness should precede phonics instruction.**

   Children from literate homes will most probably possess similar knowledge of the ways in which print works. A child that does NOT, because being read to was a rare or nonexistent event, will most probably not become a proficient reader by intense phonics practice before a thorough knowledge of print concepts is gained.

2) **Phonics should be implemented on a "Need to know" basis.**

   The decision to use phonics in initial instruction or not is a matter of one's objective. If the objective is to teach the child to read, phonics should be used only if it can be reasonably certain to work. This decision should be made regardless of the curricular material's espoused philosophy. If one's objective is, instead, to teach phonics mastery, the question must be asked: Why is phonics a necessary skill?

3) **When phonics is used, other strategies should be equally emphasized.**

   The phonetic cueing system is only one of the many available strategies for proficient reading. When phonics is taught in structured and intensive ways, the suggestion to children is that sounding out is the first, best, or most important strategy. It is none of these. Schools rarely
spend equal time and money developing or purchasing curriculum for the teaching of context clues or structural analysis. These and other strategies are easier to learn and often more reliable than merely phonetic sounding.

It is too often the practice that the child is remediated to fit the method. It is the conclusion of this study that the method should be adapted to fit the child. The matter is hardly settled, and despite Dr. Pearson's statement, cited at the beginning of this paper, it seems unwise to focus our energies elsewhere.
APPENDIX
Readiness as Represented by Reading-like Behavior and Invented Spelling

Language Units are discrete

Concepts of linearity and Directionality

The symbolic nature of print

Letters represent sounds
Sounds are arranged into words
Words are arranged into sentences
Print "moves" left to right
Print "moves" top to bottom
Books have a front and back
The alphabetic principle
The phonetic principle
Print is talk written down

Taxonomic Linguistics (Mosenthal, 1989)

SOUND
Phonetic level features of sounds
Phonemic level critical contrasts
Syllabic level /pa/ /ba/ /da/

SYMBOL
Graphic level features of letters
Graphemic level letters
Morphemic level affixes, tense markers

Lexical level
Words (ie parts of speech)

Phrase Structure level
Phrase and clause syntax

Sentence Level
Syntax of phrases within sentences
I LOVE

WITH

I LIKE IRISH

I LIKE CIGARS

I LIKE DINING

MIBRIS

IT KID H
Slide #3 - A Four Stage Process to Print Awareness

STAGE I - Word Collection from the Environment.
Name, Parents' names, TO, FROM, STOP, SALE, SCHOOL, MAIL, PLAY, I LOVE YOU, PUSH, ONE, WAY, WALK, etc.

STAGE II- The Sentence Generator (Holdaway, 1979).
Known words written on cards and manipulated into sentences the child can read. Never "flashed" individually.

STAGE III- Homemade books.
Sentences from STAGE II written on half sheets of paper and bound into books.
* Child reads the book.
* Child illustrates the book when successfully read. (Silent reading practice)

STAGE IV- "REAL READING"
* - Memorized text - (fingerpointing)
* - Familiar Text - (Memory Prediction/Graphophonic Confirmation and disconfirmation).
* - Unfamiliar Text - (Context, Syntax, Theme and graphophonic prediction and confirmation).
All of the toys are picked up.
My daddy loves me a lot.
The duck is on the TV.
It is time to eat my lunch.
It is cold in my room.
We go in the car a lot.
The pillow on the couch is ugly.
I love to eat green apples.
I love the big green tree.
Mom eats red apples.
Mom can pick the red apple from
the big green tree.
I will go to School

I will kiss my Mom.
SLIDE #3 - Memorized Text

All Fall Down by Brian Goldsmith, Oxford University Press 1983.

01 I see a bee.

02 I see a bee and a butterfly.

03 I see a bee and a butterfly and a bird.

04 I see a bee and a butterfly and a bird and a rabbit.

05 I see a bee and a butterfly and a bird and a rabbit and a seal.

06 I see a bee and a butterfly and a bird and a rabbit and a seal and a ball.

07 All fall down.
01 In the great green room
   There was a telephone
   and a red balloon
   and a picture of off

02 The cow jumping over the moon
03 and there were three little bears sitting on chairs
04 And two little kittens
   And a pair of mittens

05 And a comb and a brush and a bowl of mush
06 And a quiet old lady who was whispering "hush."
07 Goodnight room
08 Goodnight moon
(continues)
This is Eddy
Eddy likes to eat and eat and eat
Eddy eats round things.
Eddy eats pancakes.

Oranges
and eggs
Eddy eats square things.
Eddy eats crackers
meat
and cheese.
Eddy eats triangles.

Eddy eats pizza
salad
and watermelon.
Eddy eats circles.

and squares
and triangles.
Eddy eats all shapes.
Eddy eats and eats and eats.
Eddy looks
like what he eats.
Slide #9

C: and cheese.
    Eddy eats ... 
T: Do you know that word? 
C: No. 
T: What's the story about? 
C: Shapes. 
T: What sound does this word start with? 
C: /t/ 
T: What shape starts with /t/? 
C: /t/ /t/ triangle? 
T: Let's go back to page 13 to see if that makes sense. 
C: Eddy eats square things
    Eddy eats crackers
    meat
    and cheese.
    Eddy eats triangles.
T: Does that work?
The boy sat under the tree strumming his oud.

Some people like orange juice for breakfast.
My family likes juice made from mangos.

C: . . . My family likes juice made from . . . man-jos. Is that how you say it?
T: That could be it. Do you know what it means.
C: It must be something kind of like an orange.
T: Why do you think that?
C: Well, it couldn't be a dance. I've heard of a dance called a man-jo. No, mango.
C: How do you know it isn't a dance?
O: 'Cause you make juice from it. You can't make juice from a dance.
## Context Strategies For Pronunciation

<table>
<thead>
<tr>
<th>Expected Response</th>
<th>Reader Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. bear</td>
<td>beer</td>
</tr>
<tr>
<td>2. ship</td>
<td>sheep</td>
</tr>
<tr>
<td>3. watch</td>
<td>wash</td>
</tr>
<tr>
<td>4. bird</td>
<td>beard</td>
</tr>
<tr>
<td>5. cap</td>
<td>cape</td>
</tr>
<tr>
<td>6. hill</td>
<td>hall</td>
</tr>
<tr>
<td>7. kite</td>
<td>kitty</td>
</tr>
</tbody>
</table>

17/24 70.8% phonetically accurate

1) I saw a brown **bear** at the zoo.
2) I saw a **ship** on the sea.
3) I like to **watch** TV.
4) A **bird** lives in a nest.
5) I wear a **cap** on my head.
6) I slide down the **hill** on my sled.
7) I hold the string when I fly my **kite**.
References


Appendix 16

END

U.S. Dept. of Education

Office of Education
Research and Improvement (OERI)

ERIC

Date Filmed

March 21, 1991