DOCUMENT RESUME

ED 391 141 CS 012 324

AUTHOR Albert, Elaine
TITLE Why Does Phonics Work?: Process vs. Declaration.
PUB DATE 95
NOTE 6p.
PUB TYPE Viewpoints (Opinion/Position Papers, Essays, etc.) (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Elementary Education; *Phonics; *Reading Instruction; *Reading Skills; *Sight Method; *Skill Development
IDENTIFIERS Words

ABSTRACT

Reading is a skill--learning how the alphabet works by using it. Learning how to do it involves practice in building letters into words. As the decoding process is practiced, phonics moves into long-term storage. Building the skill of reading has the same 4 aspects as developing other skills: (1) the beginner uses the motion of his vocal organs to repeat the sounds the letters represent; (2) once the beginner discovers how to build 3-letter words with the short vowel, succeeding steps are merely variations on the first step; (3) the first early discovery of how to build those 3-letter words may be startlingly rapid; and (4) once the skill has been obtained it is not forgotten. In contrast, there is the look-say or whole word method in which recognition is factual, declarative. While look-say victims turn up in fourth grade unable to read more difficult texts, phonics users have moved on into reading whatever is available. (RS)

Why Does Phonics Work? Process vs. Declaration

> *"Psychologists had come to distinguish between two kinds of memory-- procedural and declarative, learning How versus learning What. After we learn to ride a bicycle, we cannot articulate the knowledge we have gained; all the little micromovements are stored implicitly throughout our central nervous system as processes not facts. Some of this knowledge, if we can call it that, seems to reside locally in the form of spinal cord reflexes that are not under the direct. control of the brain. In experiments with human amnesiacs and monkeys, Larry Squire , Stuart Zola-Morgan, and other researchers had built a convincing case ,that the hippocampus is crucial to the ability to store facts but not procedures."*
>
> *George Johnson: In the Palaces of Memory, [Knopf, 1991 p.55]*

Two kinds of Memory. How vs. What? Procedural vs. Declarative. Process vs. Fact Kinetic vs. Static.. Building vs. Recognizing. Process involves time. Procedures and building are motions, and motion uses time . Recognizing is immediate and static.

Can we examine the living brain to see how it works? That's pretty much a no-no. As Steven Rose has put it— "We have to make-do with indicative rather than conclusive demonstration.". But we may observe some of our own experience . Which do we remember over the years, which have we forgotten all too soon? How to knit or where did I put my needles? How to use a scissors or where did I leave the scissors? How to drive to Laura's house or what was the name of that nice lady I met there? It is said that children do not remember much before age 4 or 5, but look what they do remember-- how to walk, how to talk, button clothes, tie shoe laces, use a spoon, drink from a cup, handle crayons and scissors. Learning How.

Which do we forget-- how to read or what was the name of the author?

Researchers in brain studies divide memory into "short term" and "long term". The "short term" is very short, — the number of items we can grasp in a second or so, about seven digits on average., Short term memory may last for minutes but not for hours. The short term memory is labile, fleeting, apt to slip away. Its survival rate is about 50/50 chance. Long term memory can last a lifetime.

One part of the brain's limbic system is the hippocampus. Facts seem to be stored in the hippocampus. Surgical removal of the hippocampus section of the brain has suggested that short term memory resides in it, but that the hypocampus may be the area where some short term memory when repeated or practised is moved to long term memory. Long term memory seems to be distributed all over the brain. cortex. Those never forgotten skills with bicycle and skates are in long term memory.

How is all this related to phonics? Phonics is about How to do something— convert ABC's into spoken language. Using phonics is a Skill,. For the learning of skills A.T. Welford [OCM p.715] finds four aspects—

1. Skills are developed with motion repeated over a period of time. For this practise to be useful, feedback is required , the more detailed and direct the better. As the skill becomes automatic and no longer needs conscious attention, performance becomes highly efficient.

2. The strategies for learning a skill can transfer from one task to another similar task.

3. Improvement tends to be rapid at first, then more gradual, but continues over several years.

4. Once a skill has been attained, it lasts for years. Even if the skill is not practiced for a time and loses its sharp edge, it can be rapidly regained.

Reading with phonics is a skill. Instruction in phonics shows the child how to put the letters together to make words. And so building the skill of reading has the same four aspects——

1. The beginner uses the motion of his vocal organs to repeat the sounds the letters represent. Then he uses his fingers to write the letters or to put some ABC cards into sequences, building the sounds into words. Phonics is action, process. As with learning any skill, it needs practise with feedback. Since phonics practise is always done out loud, there are immediate feedbacks when the learner reading aloud hears familiar speech. There may also be the feedback from an observant tutor ready with the word "Yes!" But lacking that individual attention, the learner can hear always his own results. The very word *phonics* means *sound.*

2., Once the beginner has discovered how to build three-letter words with the short vowel, succeeding steps (adding another consonant, using digraphs, etc.) are merely variations on that first step. Having learned how to use pencil and fescue on three-letter words, the learner can move his pointer through longer words, sounding them out letter-by-letter.

3. The first early discovering of how to build those three letter words may be startlingly rapid. As the learner adds more phonic details to his skill and encounters longer words, the pace may seem slower, but once begun, the learning goes on to move the skill into the automatic, unconscious level.

4. Once the skill has been attained, we do not "forget" how to read. True, a stroke or a blow on the head may damage brain cells for this or any other part of the brain, but such damage is not the same as forgetting. The reading skill normally endures for a lifetime.

In contrast, there is the look-say or whole word method in which recognition is factual, declarative. The teacher states (or guides the children to guess) that RABBIT is "rabbit"— the creature in the picture. There are flashcards to promote instantaneous recognition. When the children take home their workbooks, the task is to match items, recognition of similar entities—this *what* matches that *what* .

Eventually the look-say victim turns up in fourth grade unable to read more difficult texts, and worse—miscalling again and again, unable to remember the very words that were first drilled in grade one.. This turns a text into nonsense. Here are some samples recorded from "remedial"- students' readings—

People dislike mice though out so much as rats.
Where there they taking us?
He read very book he took find.
There had both them where to let they starve.
We seven show be enough for coming.

Since look-say or whole word learning encourages discussion rather than in round-robin reading aloud, these strange misreadings go unnoticed until it is too late.

For the phonics user it is another story. The phonics user has moved on into reading whatever is available— street signs, cereal boxes, comics, or, hopefully, the great children's classics. According to Arnold Gesell, the normal seven-year-old reaches a stage of compulsive reading practice. He delights in repetition and will read the same book over and over again. Repetition is the way a skill is made permanent. By the time he is eight, the youngster may be more interested in sports and socializing, and so we need to be sure that he has his phonics well in hand before age seven. He never forgets How to Read., though it is easy to make him appear stupid by consuming all his time with dull, easy schoolbooks., by wasting his hours in riding the bus or having to do busywork homework.

A curious parallel comes up in mathematics. How do you know that 7+5=12— because you memorized it? or by counting beans or using your fingers? A teacher observes— " As an eighth grade mathematics teacher I see daily the problems that my students have. I can pick out the child who has had a background in using manipulations He is the student who has the solid foundation in the concept of addition, subtraction, multiplication, etc. He is also the student who can problem solve in

mathematics, communicate in mathematics, connect to his real world, and has good reasoning skills. The student who has not had such experiences has a struggle. Unless a student understands the concept of multiplication, you can make him memorize facts all you want, but I will guarantee you that he will not know them in grade eight."

Reading is a Skill.— learning How the Alphabet Works by using it.. Learning how to do it involves practise in building letters into words. . As the decoding process is practised phonics moves into long time storage. Then it is there for life.

Although it's been more than half a century since I learned how to read, (with phonics, of course) yet today I am having no trouble remembering how to write or how to read these lines. Now, where did I put my glasses?

Anold Gesell: *The Child from Five to Ten* [Harper 1946]
Richard L. Gregory, editor: *The Oxford Companion to the Mind* [Oxford University Press, 1987] OCM
George Johnson: *In the Palaces of Memory* [Knopf, 1991
Robert Ornsatein and Richard F.Thompson: *The Amazing Brain* [Houghton Mifflin,, 1984]

Elaine Albert
Emerita, English, Western Michigan University
Tutor in reading since 1960
Author: How the Alphabet Works, 1990 [ERIC #ED 324 661]
Reading with Hornbook and Fescue, 1974, 1986.