## DOCUMENT RESUME

ED 094 321 CS 001 193

AUTHOR Greenfield, A.

TITLE The "Natural Cluster" Method of Teaching Reading: A
Cognitive Approach Using Children's Spranisingly

Cognitive Approach Using Children's Surprisingly
Large Vocabulary in "Fun & Success" Games that Yield

Child-Created Word Clusters.

PUB DATE May 74

NOTE 6p.; Paper presented at the Annual Meeting of the

International Reading Association (19th, New Orleans,

May 1-4, 1974)

EDRS PRICE MF-\$0.75 HC-\$1.50 PLUS POSTAGE

DESCRIPTORS \*Associative Learning; \*Beginning Reading;

Educational Games; Elementary Education; Language

Experience Approach; \*Reading Games; \*Reading

Instruction; Sight Vocabulary; \*Teaching Techniques;

Vocabulary Development

## ABSTRACT

A no-cost, easy to use technique for increasing the reading vocabulary of beginning readers is described in this report. A large number of common words can be elicited from children in a word-association game, to which children respond with words that are highly meaningful to them, and often to their culture. The children then use these words to create sentences. Every associative response is greeted by the teacher with a verbal reward, maintaining interest and enthusiasm. Learning takes place because (1) following a cognitive model, reinforcement of the child's own creation produces high interest and attention and builds a sense of competency: (2) a large number of readily available associations strengthens meaningfulness, thus aiding recognition and enhancing comprehension; and (3) the recognition of a word increases the chances of recognition of its associates. The difficult function words, low in meaningfulness, are taught as connecting words, embedded in meaningful phrases created by the children. In pilot studies, children have read fluently words and sentences they created weeks earlier. (Author/TO)



A COGNITIVE APPROACH USING CHILDREN'S SURPRISINGLY LARGE VOCABULARY

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By A. Greenfield, Ph.D., Kingsborough Community College

18 Amherst St., Marklyn , 114 11235

According to Dolch (1960), "children enter first grade knowing 2,000 to 3,000 word meanings." Estimates today are higher. Yet first graders are required to learn to read only 250 to 300 words. Poor readers learn less than half this mimoer.

A large number of commonly used meaningful words can be elicited from a group of children in a few minutes of a word-association game that is fun, challenging and always results in success responses (to counter that sense of failure so prevalent among reading-retardates).

A game is begun by saying, "I'm thinking of the word \_\_\_\_\_ (e.g. "water"); what does the word "water" make you think of? Responses from kindergarten up include "swin," "ocean," "drink," "wash," "rain," etc. (one example of a word cluster).

Every response is greeted by the teacher with a rewarding "good," "right," "interesting," etc.; then is written on the board and copied by students. Response words and occasional phrases are naturally meaningful to the child, and at times spring from his culture. The middle-class teacher in an innercity school has available daily use of a common meeting ground for mutual exchange of her's and the children's cultures and language forms.

Next, children are asked to "create" sentences using these words. Frequent responses to the "water" list are, "I drink water," "I like to swim in the ocean," etc. Thus within a few minutes perhaps a dozen words are on the board and copied into notebooks.

Students are then asked to volunteer a word to start the next game.



The teacher joins to give her associations also. Starter-words are presented either by students or teacher. Sources of teacher starter-words include difficult words from interesting stories, from Experience Charts, from "Show and Tell", and even from basal readers. Any kind of art work or picture is an excellent starting stimulus. End of session review of words and sentences can include questions on phonics and even on spelling.

Weeks later, children recognize these word clusters and sentences (many of the words are far beyond the Dolch list) because:

- 1. The guaranteed success in terms of teacher acceptance of every associative response produces mounting enthusiasm and interest, and virtually 100% attention. (Here is the cognitive emphasis on attention and motivation produced by reinforcement.)
- 2. An experiment by Parker and Noble (1963) showed that learning could be improved by artificially increasing the number of associations to a verbal stimulus. This experiment supports the contention that a large number of readily available associations to starter-words aids in their recognition. Further, comprehension of starter-words is enhanced because the cluster network of associations enriches the computative structure around the starter-word.
- 3. Rouse and Verinis (1963) showed that recognition of one word improves the chances of subsequent recognition of any of its associates; e.g. recognition of the word "water" facilitates recognition of "drink", "swim", etc.

The word-association technique-game can be applied in a veriety of ways, limited only by the teacher's ingenuity and imagination. If a story is to be read by teacher or by children, key words or phrases can be "gamed" before the story is read, and the difficult words, after it is read. The next day rereading is more successful. Hence, interesting stories and even school-



magazine or newspaper clippings can be used despite words in them beyond the grade level. As mentioned earlier, Experience Charts and "Show and Tell" activities provide starter-stimuli. The same is true for "Show and Tell" activities.

As soon as children become aware that drawings, pictures, or toys are used to start the game, many are submitted to the teacher. The most productive pictures are those of animals, children, and families. An appropriate question is, "What does this picture make you think of?" or this animal, etc? It is not necessary to interrupt the trend of spontaneous reaction to the picture by writing while the children are talking. Key words and phrases can be written after several responses have occurred.

A common problem smong poor readers is confusing words that are similar in appearance, e.g., "three" and "there", "parent" and "pocket", etc. Using each as a starter-word, and comparison of the wide differences in associations helps to strengthen differentiation.

Experience in pilot studies has shown that hyperactive children volunteer most often and give the most varied associations. They also score highest in reviews and tests.

The withdrawn, dull child looks startled each time his answer is labelled "right", "good", etc. During the first games, such a child may not volunteer until a leading question is directed at him: e.g., to the starter-word, "water", the question could be "What does the word 'water' make a sailor think of?", or "a mother think of?", etc.

In general, it has been found that a sense of achievement, a sense of competence eventually develors to replace that sense of failure so evident among reading-retardates. Creativity begins to appear as the children learn



to risk their thoughts, their fantasies, their hypotheses; as it dawns upon them that someone is interested in listening to these. Later in the year, a story can be written around the associations to a word or picture.

Children have been able to play the game at home with parents, siblings, or friends. The class or group can choose a word or two to use as "starters" outside of school. Many children show obvious pride the next day in telling the words these elicited. Parent workshops, or even a letter to parents can show how the game can be played around the dinner table.

No writing is required in this "homework". Hence the game often proceeds in "chain" fashion: word A elicits word B which then becomes the stimulus—word to elicit word C, and so on. With a word like "water", results hardly differ; but the word "look" could yield "eyes" which could itself evoke "nose", en unlikely response to "look". This "chain" variation of the game is used in kindergarten classes where it promotes reading readiness by enlarging verbal experience. Thus even 5-year olds begin to learn words from each other, from each other's cultures, and from the teacher's associations.

Abstract words, less meaningful to children are more difficult but these usually evoke concrete associations. For example, to the abstract word "property", a response was "Keep off, private property"; to "information",—"telephone", "library", etc.

The least meaningful of words, the small very familiar-to-children prepositions, conjunctions, etc. such as "of", "or", "and", are the bane of the poor reader. Actually these words are concepts, which perform "functions" in phrases and sentences.

These "function words" are taught most effectively by embedding them in a large number of meaningful concrete phrases. For example:

bread	and	Constituting the same world to	candy or	cake
Jack	and	ds pro-lago-partitional, tryps-sale_trets-t	playball	or
	and	the land value have addition -		or



The children volunteer familiar combinations themselves, such as spaghetti and meatballs, ball and bat, etc. Leads are supplied by the teacher only if necessary.

The "function words can be in a continuing unit on "connecting words", a phrase which children understant. With brighter children, it is possible to elicit the actual concept that some of the "connecting words" represent. Asking "Can you think of a word that covers this whole list?", yields "partners", "together" for the "and" list; "deciding", "choosing" for the "or" list, etc. These concepts act as "umbrellas" for the lists of concrete phrases. The longer the list or "cluster" of phrases, the stronger the base for understanding and retaining the concept and its function.

Pilot work with the "natural Cluster" method was highly successful with lst and 2nd grade classes, with small groups of reading-retardates in Corrective Reading, and with classes of older retarded children. Integrated groups naturally provided a greater variety of responses and inter-cultural learning. Given to kindergarden classes for reading-readiness, participation was excellent, and enjoyment obvious.

A group of five 2nd grade reading-retardates seen for one 40-minute period per week read fluently over 90% of the words and sentences they had "created" more than a month previously. The Principal of the school said, "this technique motivates the unmotivated".

A conservative estimate of words learned should be an average of 10 new words per 40-minute leason per day. (later in the year, words previously learned will show up. However, this will be compensated for by the greater facility for the game the children develop, resulting in a greater number of associations.)

In three sessions per week, or about 100 sessions per year, this gives



a total of about 1,000 words "created" by children from their own vocabulary. If only half of this 1,000 is retained by year's end, then about 500 familiar words have been learned.

A great advantage of this technique is that it can be used as a <u>basic</u> <u>program</u>, as a <u>supplement</u> to any ongoing program, or for a <u>small group</u> corrective or remedial reading program. Once the teachers have mastered the technique, using it costs nothing.

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