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The Use of Self-Generated Drawings as a Strategy for Teaching Sight Vocabulary

Mary Kline
The College at Brockport

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THE USE OF SELF-GENERATED DRAWINGS AS A STRATEGY FOR TEACHING SIGHT VOCABULARY

THESIS

Submitted to the Graduate Committee of the Department of Curriculum and Instruction Faculty of Education State University of New York College at Brockport in Partial Fulfillment of the Requirements for the Degree of Master of Science in Education

by

Mary Kline

State University of New York College at Brockport Brockport, New York December, 1984
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Abstract

The purpose of this study was to investigate the effectiveness of a drawing approach to teaching sight vocabulary compared to a more traditional teaching method.

This study involved thirty-one second graders divided into two groups. The students in the self-generated drawing group wrote the word on their paper, drew a picture about the word, and wrote a sentence about their picture utilizing the selected vocabulary word. The traditional or sentence group followed the same procedure but omitting the drawing. Both groups read their sentences aloud with the thirty minute lesson ending with a flash card reading of the three words used in that lesson.

Three posttests were used to analyze data: sight word identification test, sight word maze test, and an attitude scale. A two-factor analysis of variance was used to test the hypotheses posited in this study. A t test for independent means was used to interpret results from the attitude scales. There were no significant statistical differences between the two methods. Subjects appeared to learn sight vocabulary equally well with either method.
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Chapter I

Statement of the Problem

Purpose

The basic purpose for this study was to investigate the effectiveness of using drawings generated from a child's experiences and gestalt framework to identify and attach meaning to sight words.

Need for the Study

The use of art in education, until recently, may have been a neglected factor in teaching skills associated with reading (Corwin, 1980; Fenwick, 1978; Fillmer and de Kane, 1980). "Developmental theory has indicated that concrete motoric activity, such as drawing, facilitates learning for young children" (Fillmer and de Kane, 1980, p. 641).

Research indicates that use of the graphic image reflects the developmental stage of a child (Davis, 1977; Kellogg, 1967; Platt, 1977; Samples, 1977). The use of drawing and other art media may be an important approach in combining written, oral, auditory and tactile learning modes.

Silverston (1974) stresses the importance for a child to build a sight vocabulary. He points out that the lack of this instant recognition of a word will require a child to spend too much time in decoding at the expense of comprehension.
Silverstone's (1974) model for word recognition is as follows:

Basically, the student is shown a word and is given its auditory representation (visual to auditory transfer). He verbalizes the word (kinesthetic to auditory transfer) and then listens to a recording of his verbalization while looking at the word (auditory to visual transfer). Finally, he writes the word down and reads his writing (kinesthetic to visual to kinesthetic to auditory transfer). (p. 7)

After analyzing several word recognition strategies and testing his own model, Silverston concludes "that coordination of certain sense modalities, when it is present in the learning of a new written word, increases the probability that this word will be retained over a period of time" (p. 1). One of the word recognition strategies he studied was the use of a context method of learning sight words. A context method appears to involve more intersensory modes than the whole word, phonic, or spelling approaches. It is this researcher's contention that the Self-Generated Drawing Technique used in this study is such a contextual intersensory approach for learning vocabulary.

The drawing technique could be considered an adaptation of Silverston's description of the intersensory mode of teaching sight words. In the drawing technique developed by this investigator, the students as a group verbalize the word. Each child will then draw on his/her own background experiences and associations to attach a visual (drawing) picture to the concept of the word. After the picture is finished, the student writes (kinesthetic) a sentence using the word. Finally, the students read their sentences and show their drawings.
Questions

The questions investigated in this study were:

1. Will the identification of flashed sight words be facilitated for second graders by using self-generated drawings of the concept of the sight word?

2. Will the learning of sight word meanings be facilitated by the self-generated drawing technique?

3. Is there a significant difference between male and female subjects' ability to identify sight words?

4. Is there a significant difference between male and female subjects' ability to attach meaning to sight words?

5. Is there a significant difference between the two groups' attitudes toward learning sight vocabulary?

Definition of Terms

The terms used in this study are defined as follows:

**Drawing Group:** The group using the self-generated drawing technique.

**Self-Generated Drawings:** An individual's drawings connected with experiences and objects which have unique, personal value.

**Self-Generated Drawing Technique:** The subject is presented with a sight word, definition, picture, and sentence example and is asked to copy the word, draw a picture about the word, and then put the word into a sentence.

**Sentence Group:** The group using a traditional sight word method.
Traditional Sight Word Method: A sight word is presented with a flash card, definition, sentence example and picture. Subjects are asked to write their own sentence using the sight word.

Sight Words: "A sight vocabulary is composed of those words which can be recognized instantly without the aid of word analysis techniques" (Doane, 1979, p. 20).

Context Method: The context method is a word recognition strategy in which "word meaning and relationships between words is stressed" (Silverston, 1974, p. 3).

Intersensory Transfer: Intersensory transfer "refers to the ability to translate information from one sensory mode to another" (Silverston, 1974, p. 1).

Sight Word Identification Test: 157 sight words were selected by pretesting three second grade students with both Fry's 600 Instant Words and the Dale List of 3000 Familiar Words. The subjects in the study were then tested by flash identification of these words as a screening measure. The posttest, at the end of the six week program, contained the actual 54 sight words used in the study.

Sight Word Maze Test: The sight words were presented in a modified cloze format (Blachowicz, 1977) with three sight words given as possible choices to fit the context of the sentence. This test was used in the beginning of the study as a screening device for the selection of the actual words to be used in the program. The test was again used as a posttest measure, but the test contained only the words actually used in the six week program.
Limitations of the Study

The study contained two distinct limitations. First, the study was limited to only two vocabulary methods using thirty-one students at the second grade level. Second, the study covered only a six-week teaching period.

Summary

Research indicates that the use of drawing with young children may play an important role in reading. Some children may need to go through a transitional "symbolic" stage of activities such as drawing before moving onto the complexities of the visual and auditory elements of language (Samples, 1977).

This study evaluated a self-generated drawing technique developed by this researcher as a method of teaching sight words and analyzed the implications for using this method for the classroom.
Chapter II

Review of the Literature

The purpose of this study was to investigate the effectiveness of using drawings generated from a child's experiences and gestalt framework to identify and attach meaning to sight words. The following research relating to this study included sight vocabulary, creativity and art education, and reading and art.

Sight Vocabulary

According to Dale and O'Rourke (1971), children begin learning language through sensory exploration of their world. As children begin the process of learning language, they are able to attach words to express what Carroll (1964) describes as "concepts" or "classes of experiences." He describes this close interaction between concept and word in which "the word must evoke the concept and the concept must evoke the word" (p. 186). Words, meanings, and concepts each have certain properties with words standing for the written or spoken language; meanings being associated to the words through usage; and concepts formed in a twofold manner through individual observance and communication of the concept through language (Carroll, 1964).

As a child enters school, one of the roles of education is broadening the communication abilities of this child. Dale and O'Rourke (1971) state that "education is vocabulary development hence conceptual development; we are studying words and symbols all the time" (Dale and O'Rourke, 1971, p. 5). Research indicates that each child is unique with different factors such as sex, maturity, social and economic level
having a distinct impact on language and concept development (Dale and O'Rourke, 1971; Dolch, 1953; Thorn, 1969).

For the child beginning the education process in schools, a sight vocabulary assumes immense importance. The developing of sight vocabulary allows a student more time to develop meaning from reading (Gustafson, 1974; Silverston, 1974). According to Tinker and McCullough (1975), a sight word vocabulary has two different connotations. One connotation for sight vocabulary refers to the method by which sight words are learned. The other connotation refers to those words which are easily identifiable even out of context.

Researchers agree that children's initial sight vocabulary should be words and concepts with which they are familiar (Dolch, 1953; Finocchiaro, 1974; Thorn, 1969). In order for students to build new meanings, children must have old meanings (Dolch, 1953). Dolch cautions teachers against expanding vocabulary without also developing new meanings.

Not only does a child need to build a sight vocabulary in order to read, but vocabulary development must also occur in the listening, writing, and speaking modes of communication (Gordon, 1976; Thorn, 1969). Silverston (1974) speculates that the interaction of these different modes of learning will increase the learning of a word.

The language experience approach to teaching sight vocabulary draws on a child's unique experiences and builds a vocabulary framework upon which students can easily attach meaning. Thorn's (1969) description of the language experience approach follows:

The popularity of the method with both children and teachers stems from the fact that it develops language in close relation to children's experiences and builds a program that is in harmony with both the communication needs and the interests of the children being taught. (p. 3)
Thorn stresses the interrelationship between the oral expression and listening experiences of a child as being important qualities for the beginning reading process.

Kirkland (1978) also supports a language experience approach-type program saying:

There is evidence that language which represents the language systems of children is more comprehensible to them than syntactic patterns that are unlike children's language. For the first stages of reading, this means that stories children dictate from their own experiences will provide the best written material for reading instruction. (p. 503)

Research indicates the myriad complexities connected to the acquisition of a vocabulary and the implications of vocabulary learning to reading. The process of learning vocabulary can be compounded by the imagery evoking properties of words in such areas as use of pictures in instruction, concrete-abstract quality of words, association properties of words, and modality preference in learning new words. Not only must a child confront the different image qualities of a word but also the lexical properties of words.

Thus, the major task in reading seems to concern the child's ability to link indirect experiences to symbols or printed language. Dale and O'Rourke (1971) state "this association is a difficult one and needs to be reinforced with imagery--another form of indirect experience" (p. 16).

Imagery has been defined in different ways but some are operational definitions reflecting the theories of psycho-linguists (Cooper and Petrosky, 1976; Smith, 1973) that the reader is actively involved in the reading process with prior information and experiences influencing the learners' interpretation of stimuli.
The following definitions of imagery are alike in that they are based on prior experiences. For instance, Bulgelski (1970) defines imagery as:

Fractional responses to stimuli which have acquired, we presume, the capacity to activate some of the same physiological operations that occurred on some prior occasion when an appropriate stimulus has been present. (p. 1002)

A definition of imagery as being "word-paradigms" is given by Fisher (1977) whereby "it may describe an object or a representation of an object" (p. 134). His definition described words as being transformed through imagery into concepts. A more inclusive imagery definition by Horowitz (1970) stated:

images are not merely imitations, but memory fragments, reconstructions, reinterpretations, and symbols that stand for objects, feeling or ideas. (p. 4)

Imagery research conducted in the use of pictures to encourage reader prose comprehension have yielded conflicting results. Levin and Pressley (1978) concluded that pictures facilitate learning the prose passage with young children, but according to Paivio (cited in Sheehan, 1972), "the nonverbal (concrete image) code is directly aroused by pictures but only indirectly (associated) by concrete words" (p. 259).

Research has also indicated that pictures help with learning of some words but not others (Jorm, 1977). Ghatala, Levin, and Wilder (1972) concluded that "superiority of pictures over words in discrimination learning tasks and in recognition tasks can be accounted for in terms of frequency theory" (p. 13).

A conflicting study by Bender and Levin (1978) concluded that in the case of educable mentally retardates, pictures may facilitate better recall in prose learning.
Ehri and Wilce (1980) speculate that children have extensive linguistic experience before beginning to read and this linguistic knowledge must be connected on the lexical level to the printed word. They explain the identities of words consist of their phonological or sound properties, syntactic function or how words function in sentences, and semantical or meaning function of words. Words also have orthographic form which Ehri and Wilce describe as becoming part of "memory as a visual image" (p. 453). Amalgamation processes are described by them as "processes by which this orthographic identity merges with the word's other identities to form a single unit in lexical memory" (p. 453). Their study examined whether beginning readers read function words better when presented on lists or in sentences. Their findings supported both the focus attention theory and the contextual theory in that:

- beginners who practice reading and interpreting words in meaningful sentences learn more about the words' syntactic/semantic identities whereas children who read the words as isolated units learn more about their spellings and how the orthographic forms symbolize pronunciations. (p. 470)

They also concluded that sentences can, as with pictures, initially distract the beginning reader.

Other research investigating the effects of pictures and use of context in learning new words indicated using the focal attention hypothesis helped the reader become more efficient in learning words (Singer, Samuels, and Spiroff, 1973-74). They contend the focal attention hypothesis allows the child to focus attention upon the graphic elements of words without being distracted by other cues such as pictures and sentences.

Kolker and Terwilliger (1981) examined the effect of imagery on learning sight vocabulary in isolation. They concluded:
If a beginning first grader knows the meaning of words but cannot recognize them at sight, he will learn to recognize at sight the words which are classified as high imagery in fewer trials than words classified as low imagery. (p. 257)

In a subsequent study, Terwilliger and Kolker (1982) examined learning confusable words and their effect on learning high or low imagery words. They defined confusable words as being "ones with similar beginning letters for every second word, while non-confusable words did not have similar beginnings" (p. 286). The subjects were more efficient recognizing high imagery words. They concluded that:

The effect of forcing attention on the letter order and graphic structure seemed to lessen with time, whereas, the level of imagery remained a more constant factor in predicting rate of sight vocabulary learning. (p. 292)

Reinforcing other imagery research, Van der Veur (1975) rated 1000 words for imagery for first graders and also concluded imagery rating played an important role in facilitating the learning of words. Similar research by Olson and Pau (1966) on the learning of emotional loaded words concluded "that children can learn phonological reading responses to Emotional words more easily than they can to Nonemotional words" (p. 177).

Paivio and Begg's (1971) association study comparing concrete nouns with abstract nouns in short-term memory tasks concluded that short-term memory performance was more readily available for concrete nouns.

Paivio and Csapo (1969) studied the effects of concrete images in the forms of pictures and verbal memory codes. The stimuli involved object pictures with concrete noun labels and abstract nouns. They found in sequential memory tasks that subjects did not perform well in memory for pictures at a fast rate. The subjects' performance improved
at the slower rate since, according to the findings, the slower rate allowed the verbal code to come into use.

The general consensus was that when the imagery involves verbal codes it may facilitate meaning, but pictures as visual imagery stimuli are likely to cause interference except in studies of short-term memory retrieval and the educable mentally retarded (Bender and Levin, 1978).

Hinze (1961) dealt with word associations in prose paragraphs comparing the association of words as either positive or negative in isolation to their association in contextual setting. Hinze identified the concept of "conflict words" as words identified as positive when they were in isolation, but when encountered in a paragraph, they had a negative association. The findings indicated that when conflict words were encountered in the paragraph, and if they were key words to meaning, the result may be misinterpretation of the paragraph. Also, this study found that affective materials contained more conflict words than non-affective materials, leading to the conclusion that the use of affective materials may possibly be a better assessment of comprehension.

According to Ollila and Chamberlain (1978-1979), "authors and teachers should take into consideration the abstractness/concreteness of new words as they are introduced to children" (p. 291).

Another concern in word association studies and imagery in prose learning was the effect the different imagery modalities have on learners. The visual, auditory, and tactile learning modalities were representative of the type of modes examined by researchers.

An example of this type of research was completed by Paivio and Okovita (1971) comparing blind and sighted subjects. They found "that the associative learning for the blind subjects was facilitated by
auditory imagery of words whereas normal subjects benefited from visual word imagery" (p. 509). The sighted learners had a preference for the visual modality, but they also did better on both visual and auditory instruction.

According to Radaker (1959), one theory involving modality learning was the "distractability theory." He concluded that "this theory was founded on the premise that the imagery modality least affected by interfering stimuli automatically determined the dominant modality" (p. 6).  

Creativity and Art Education

Samples (1977) describes the human brain as composed of a left hemisphere and a right hemisphere connected by a band of tissues called the corpus callosum. The left hemisphere is described as the rational-linear mind whose abilities are used in reading, writing, and math activities. Samples describes the right hemisphere or "metaphoric mind" as being cyclical in function. The intuitive, holistic, and image formations are operations of the metaphoric mind. "The metaphoric mind presumes connectedness and searches it out" (p. 691).

One criticism of the educational process is the failure to exploit the right function of the brain. With the exception of the "Symbolic-Abstract," or language, Samples concludes the use of right brain functions is diminished with the child's educational and cultural progression. If a child has not reached the ability to what Samples refers to as "symbolic-abstract" mode or language expression (either verbal or written), then that child should use "symbolic-visual" expression such as painting or drawing (Davis, 1977; Platt, 1977; Samples, 1977).
"Children who have been free to experiment with and produce esthetic forms have already developed the mental act required for learning symbolic language" (Kellogg, 1967, p. 22).

Hunter (1976) suggests all learners are handicapped when information is directed to the function in only one hemisphere. She also speculates that learners need to have teaching directed to using both hemispheres singly and in conjunction to process information.

She states the problem more cogently in that:

Individuals may be born with a predisposition to use their right or left brains; however, as with handedness, practice has a great deal to do with skill. (Hunter, 1976, p. 45)

The teaching of art plays an important role not only in communication and self-concept but perhaps more importantly in allowing the child to develop self-directed goals. When a child has mastered a concept and is ready to develop in a related direction or a new direction, the teacher's role is perceived as a guide (Churchill, 1971; Craig, 1967; Ritter and Shepherd, 1942; Wolf and Gardner, 1980). Churchill further describes the role of guide for the teacher:

The informal method puts teachers in the role of helping children evaluate their activities, providing well-articulated choices for them to make, and broadening and enriching the scope of the studies they have undertaken with correlated ideas from other disciplines. Let the children do, and let the teacher supplement and guide. (p. 402)

Review of the literature indicates that developing creative thinking ability will help guide the student to self-directed learning. Lowenfeld and Brittain (1975) stated that the process of creative thinking in art is more important than the product. They link creativity to the development of thinking and self-concept:

It is much more important to develop creativity than competence in children, because creativity cannot easily be learned at older age levels, whereas it is doubtful if
one can teach youngsters of elementary school age very much in the way of lasting artistic skills and competencies. (p. 65)

Lowenfeld and Brittain (1975) discuss the effect of using a depth approach to teaching art versus using many materials and methods in teaching art. A depth approach to art involved spending more time fully exploring a limited amount of materials or methods whereas the teaching of a wide variety of materials and methods was used most in schools. They pointed out that some studies indicated a depth approach to art had more favorable findings but at the college level, the trend tended to be less conclusive.

The research indicates that both creativity and mental growth are developmental in nature (Brittain, 1979; Churchill, 1971; Goodenough, 1926). Children go through the same developmental stages either gradually or rapidly depending upon the individual differences. Art education more than any other content area emphasizes individual and creative differences within children (Arnheim, 1969; Goodlad and Morrison, 1980; Lowenfeld and Brittain, 1975; Lowenfeld, 1964).

Goodenough (1926) concluded that the conceptual development of a child in both drawing and intelligence followed basically the same route (Davis, 1977; Kellogg, 1967; Platt, 1977; Samples, 1977). "Drawing, to a child, is primarily a language, a form of expression, rather than a means of creating beauty" (Goodenough, 1926, p. 12).

Art, described by Cohen and Gainer (1977), is a language which can be invaluable in aiding communication with a child's ideas and concepts. They further illustrate the role of art in communicating by saying:

"Art functions as a language because it is a communication system in which visual statements clarify ideas and stimulate further ones. Necessary to this communication
is a process involving selection and organization of those ideas to art media. (Cohen and Gainer, 1977, p. 202)

A study examined by Fillmer and de Kane (1980) which used art activities to generate oral composition came to several significant conclusions concerning the use of art. Drawing was able to produce and stimulate more oral language, and "children seem to work out their ideas before they verbalize them" (p. 642).

Brittain (1979) observed from studies conducted at Cornell University that when children talk about their drawings with an adult, the children use the drawing as a reference point. More importantly, communication was going on not so much with the adult, but the child was using the drawing to communicate with himself. Brittain concluded that:

drawing and painting ... could be an excellent means of facilitating cognitive development, the means through which a child organizes his concepts so that they become understandable to him and become assimilated into his intellectual functioning. (p. 184)

The need to draw seems to be a common characteristic among children. D'Amico (1953) states:

We should by now realize that the creative experience is a necessity for the healthy growth of all children and that art experiences should be so planned that the least able child and the most proficient child find satisfaction in them. (p. 2)

In an article, "The Basics and Beyond," Eddy (1977) discusses the concern educators have shown in adequately teaching the basic skills, but also there is growing concern among them beyond the teaching of basic skills:

They are saying that the arts are essential to learning not only for their own sake—as representations of man's creative nature and a record of our cultural heritage through the ages—but also that they have profound utility for the process of basic skill development. (Eddy, 1977, p. 11)
Fantini and Young (1970) point out the need for education to find new solutions to meet the increasingly complex needs in our society. They state that:

Schools generally fail to account for individual differences and tend to promote conformity and stifle creativity. Rather than creating stimulating learning environments that confront children with opportunities for creative thinking, problem-solving, and creative behavior, they provide ready-made solutions to problems. (pp. 7-8)

Churchill (1971) advises for a more integrated curriculum:

Because of the specialization and fragmentation in our society, it is important that we integrate all aspects of education in order to strengthen the underlying unifying elements and ensure communication. (p. 407)

Comments from Brittain (1964) perhaps state the problems of change facing education more cogently:

This change of purpose—from the acquisition of knowledge to the development of the ability or abilities to function with unknowns—is essentially putting emphasis upon creative thinking. (p. 5)

**Reading and Art**

Art activities may be facilitative in remediating readers since art is characterized as a multisensory media. The art approach centers activities on the child which may improve self-concept and motivate students (Jansson and Schillereff, 1980). Esgar (1978) recommends the use of drawing as a method of testing comprehension.

Jansson and Schillereff (1980) propose that art can be used in "reconditioning" which is changing a remedial student's attitude towards reading, citing activities that are easily implemented in a classroom. Many of these activities again are child directed rather than teacher directed.
In what Platt (1977) characterizes as "grapho-linguistics," she describes the child's natural inclination to draw. "Graphic images manifest progressive stages of development corresponding to a child's mental and physical stages of development" (p. 263). A child goes through various stages of drawing in developing a gestalt. These stages include scribbling, controlled scribbling, early schema, and advanced schema or what Platt describes as the "skyline-groundline" stage of development (Kellogg, 1967; Platt, 1977).

Platt suggests that the use of the "horizontal orientation, or horizontality, will have great influence on the child's ability to perceive horizontal type and horizontal writing" (p. 264). The importance of this stage is that it signals when the child is starting logical operations.

Research by Platt with first graders used drawings with children using their background experiences to label the objects in their pictures. Half of the class was at the stage of horizontality in their drawing. The children using this method easily made the transition to a written mode of expression while referring back to the drawings. Platt concluded that the use of drawing was a natural, readily usable tool with the child able to immediately use meaning connected to previous experiences. An important facet of Platt's vocabulary acquisition was the use of writing as a transitional stage between drawing and reading.

Brittain (1979) observed in his work with students that children drawing recognizable shapes and using horizontality were also able to attempt writing their names in recognizable style.
Perhaps the best way to teach writing would be to have children draw and paint, to give them the opportunity to develop the skills necessary to accomplish the tasks at their own pace. It would be frustrating for a child who has not yet seen the line as connoting a symbol, to be suddenly confronted with a mass of lines that are supposed to connote some sort of meaning. (pp. 201-202)

In what Debes and William (1974) term as "visual literacy," they explain the importance of writing with visuals or pictures first and then writing with words. Similar research by Katz (1978) used a visual-verbal method compared with the dictionary method of teaching vocabulary. Katz's visual-verbal method included drawing or cutting out pictures to aid comprehension. The subjects in both groups improved in areas tested. The literature reviewed by Katz indicated with the use of an inductive approach to learning vocabulary and reading, the students significantly improved. The inductive method of learning vocabulary was more student directed.

Brittain (1979) examined one study which "compared two types of training programs designed to improve the reading ability of 57 kindergarten children" (p. 210). One group used the Frostig method and the other group used an "activity-experience" approach in which drawing and painting played an important role. There was also a control group.

The results showed that all children improved in their reading abilities; it did not seem to make any difference which method was used. In fact, the group that improved the most was one small control group who had no activities directly related to reading except for the teacher reading stories that children selected. (Brittain, 1979, p. 213)

This study also showed that in each of the groups, the children who did the most drawing and painting scored higher on the reading readiness tests. This type of data reinforces Dolch's (1953) description of the importance of "performance experience."
Hall (1979) reviewed twenty-one school programs that incorporated art as a total school program. She concluded that not only was self-concept improved but reading scores were also improved.

In support of the arts as necessary for a child's concept development, Kellogg (1967) discussed the following:

Reading can better be taught by recognizing the importance of the child's inherent gestalt making system as it is developed in self-taught art, and then by building upon it. Allowing a child to draw what he likes for at least 30 minutes every day in school might very well free him to continue developing his capacity to perceive abstract gestalts. (p. 22)

An evaluation report by Fenwick (1978) summarized the findings from Artist-in-Schools Program. "Consistent evidence was provided to indicate positive changes in students' attitudes toward reading and writing" (p. 468). Among the programs he examined were the Learning to Read Through the Arts Program started in New York and IMPACT (Interdisciplinary Model Program in the Arts for Children and Teachers) located in Columbus, Ohio. Both showed significant reading gains. The results of the IMPACT program "reportedly show superior problem-solving ability as well as gains in reading and mathematics" (Fenwick, 1978, p. 468).

Another similar program was the Children's Art Carnival Creative Reading Program (Mercado, 1976) "designed to service 210 Title I eligible children in grades two to five who were at least one grade below in reading" (p. 5). Basically, from the results of the program, the children showed a high percentage of mastery of instructional objectives across the board.

O'Brien (1977) has been a prime motivator in the Learning to Read Through the Arts and Humanities Program since its beginnings in 1971. O'Brien (1978) described the program as:
an intensive, individualized, reading program that focuses on the improvement of reading skills through the integration of a total art program with a total reading program. (pp. 3-4)

Students showed impressive growth on reading scores as measured by standardized tests; the California Reading Achievement Test and the Wisconsin Design Skill Development Test.

With the Learning to Read Through the Arts, the basic goal of the program was to assist the child to internalize the concrete to abstract. O'Brien (1978) points out as follows:

Cognitive theorists posit that students learn most readily if exposed to knowledge, concepts or skill in sequence that proceed from concrete to abstract. (p. 11)

Further approbation for the Learning to Read Through the Arts came about in 1975:

In 1975 the program was designated by the American Institute of Research for the National Right to Read Effort of the Department of Health, Education and Welfare as one of the twelve exemplary programs in the nation. (O'Brien, 1977, p. 10)

The evaluation report by the Office of Education (DHEW) (1980) concluded the Learning to Read Through the Arts was successful "in improving the reading skill of students in the program" (p. 14). The report gave a rundown of the philosophy of the program, staff requirements, and workshop organization.

An evaluation report of the LRTA from Schoener and Schwager (1978-1979) concluded:

The gains made by students in Title I Children's Program: Learning to Read Through the Arts are sizable. At each grade level students surpassed the criterion for success set in the evaluation design. The gains made by students can be attributed to their participation in Title I Children's Program: Learning to Read Through the Arts. (p. 16)
The Reading Improvement Through the Arts (RITA) was developed for high school students in 1975 and was based on the same philosophy the Learning to Read Through the Arts for elementary students. The impact of the program was measured by the "Evaluation Report." The results of this report, Corwin (1977) quoted "were not only significantly beyond statistical expectations for each four month period, they were beyond growth normally expected in a full year's growth" (p. 4). Corwin (1980) further examined the results and implications of the RITA in a following report.

Schiff (1977) gives further advise on the setting up of this type of program. Essentially, it is important to search out the resources available in a community. Schiff stressed the important role administrators have in utilizing community resources and in the support of a Learning to Read Through the Arts type program. The theme of the role of the cultural institutions in combining reading and the arts is further expanded by Davis (1977).

Finally, Bookbinder (1975) describes the significant role art and reading share in which:

Learning words and word usage without undergoing an experience is an exercise in futility. Only experience can give substance to learning and make understanding possible. This is where the art experience is preeminently significant. (p. 796)

Summary

The literature reviewed in this chapter indicates the importance of developing educational procedures around a child's background experiences. Vocabulary development and creativity may best be taught when education becomes child directed. The use of art in
education may be a way to encourage the creative possibilities in each child to discovering his potential for knowledge. Art education may also be a tool to help develop the concepts and language necessary for the reading process.

The use of self-generated drawings as a method in teaching sight vocabulary attempts the integration of the learning process. At the least, this method could be utilized with other vocabulary methods and at best, instead of the passive interaction with pictures which may or may not connote conceptual meaning to a child, the drawing method will by its very nature include the child's active participation in the learning process.
Chapter III

Design of the Study

Purpose

The study was designed to analyze the effectiveness of using drawings generated from a child's experiences and gestalt framework to identify and attach meaning to sight words.

The Hypotheses

The following null hypotheses were investigated in this study:

1. There is no significant difference in the identification of flashed sight words between second graders in the drawing group and the sentence group.

2. There is no significant difference in the learning of sight word meanings between second graders in the drawing group and the sentence group.

3. There is no significant difference between male and female subjects' ability to identify sight words.

4. There is no significant difference between male and female subjects' ability to attach meaning to sight words.

5. There is no significant difference between the two groups' attitudes toward learning sight vocabulary.
Methodology

Subjects

The study included thirty-one second-grade students from a suburban, middle class school. The subjects were selected from the middle and lower reading groups of three second-grade classes. The subjects were divided into a drawing group and a sentence group. The drawing group consisted of ten boys and six girls. The sentence group consisted of nine boys and six girls.

Instruments and Procedures

The May, 1980 Metropolitan Achievement Test scores were used in a t test for independent means to ascertain the equality of both groups.

Three students were used as a sample in formulating a word list from Fry's 600 Instant Words and the Dale List of 3000 Familiar Words. A total of 157 words was selected to be used in the sight word identification and the sight word maze screening tests. The screening tests and the posttests were developed by this investigator.

The sight word identification screening test was administered individually, while the sight word maze screening test was given orally to each of the three second-grade classes in group situations (Appendix A). The results of both screening tests led to the selection of the actual 54 words to be used in the six week program (Appendix B). The 54 words represented those words which 80% of the students missed on the screening tests.
Three words were presented during a session three times a week for 25 to 30 minutes a session. The drawing groups were presented with a sight word, definition, picture and sentence example and were asked to copy the word, draw a picture about the word, and then put the word into a sentence. The students then showed their drawings and read their sentences. The sentence groups were presented with a sight word, definition, picture, and sentence example and were asked to copy the word and put the word into a sentence. The students then read their sentences to the group.

At the end of the program, the students were posttested using the sight word identification test, the sight word maze test, and the attitude scale (Appendix B). The flashed sight word identification test contained the 54 words used in the program. Students were tested individually. The sight word maze test for sight word meaning consisted of the same 54 words but used a modified cloze format with three sight words given as possible choices to fit the context of the sentence. Finally, an attitude scale was given to both groups. The attitude scale contained four statements, two positive and two negative. Each statement had four possible responses and the subjects were required to circle one.

The sight word maze test and attitude scale were given in group situations. The tests were both orally presented, but in the case of the sight word maze test, only the sentences were read and not the three word selections.
Analysis of Data

Posttest scores from the self-generated drawing group and the traditional group were compared to determine the effectiveness of teaching sight vocabulary by a drawing method.

A two-factor analysis of variance was used to test the hypotheses at the .05 level of significance. A t test for independent means was used to interpret data from the attitude scale.

Summary

This study was designed to investigate the effectiveness of students using drawing as a technique in learning sight vocabulary. Two types of screening tests were used to select the words for the study. At the end of the program, three tests were used in the posttesting as an evaluating device.
Chapter IV

Findings and Interpretations

Purpose

The purpose of this research was to determine the effect of a self-generated drawing method versus a traditional vocabulary method in teaching sight vocabulary to second graders.

Analyzing the Findings and Interpreting the Data

The following null hypotheses were investigated in this study:

1. There is no significant difference in the identification of flashed sight words between second graders in the drawing group and the sentence group.

2. There is no significant difference in the learning of sight word meanings between second graders in the drawing group and the sentence group.

3. There is no significant difference between male and female subjects' ability to identify sight words.

4. There is no significant difference between male and female subjects' ability to attach meaning to sight words.

5. There is no significant difference between the two groups' attitudes toward learning sight vocabulary.

A two-factor analysis of variance was used to interpret data from the posttest using Lindquist's Model V (1953). All statistical tests were conducted at the .05 level and were two-tailed tests.
The first null hypothesis stated that there would be no significant difference in the identification of flashed sight words between the two treatment groups. The calculated $F$ at 0.29 was not statistically significant since the critical value was 5.63 at the .05 level. Therefore, the null hypothesis was not rejected (Table 1).

Table 1
Analysis of Variance Summary Table for Identification of Flash Words

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>47.42</td>
<td>47.42</td>
<td>0.29</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>184.84</td>
<td>184.84</td>
<td>1.13</td>
</tr>
<tr>
<td>Treatment x sex</td>
<td>1</td>
<td>46.11</td>
<td>46.11</td>
<td>0.28</td>
</tr>
<tr>
<td>Within Cells (Error)</td>
<td>27</td>
<td>4418.4</td>
<td>163.64</td>
<td>-----</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>4696.77</td>
<td>-----</td>
<td>-----</td>
</tr>
</tbody>
</table>

Crit. $F$ (30) = 5.63, $p < .05$

The third null hypothesis stated that there was no significant difference between male and female subjects' ability to identify sight words. The calculated $F$ at 1.13 was not statistically significant since the critical value was 5.63 at the .05 level. Thus, the null hypothesis was not rejected (Table 1).

The second null hypothesis stated there was no significant difference in the learning of sight word meanings on a maze test.
between the two treatment groups. The calculated \( F \) at 0.08 for the two treatment groups is shown in Table 2. The data indicated no statistically significant difference between the two groups at the .05 level with critical value of 5.63 and failed to reject the null hypothesis.

Table 2

Analysis of Variance Summary Table for Sight Word Meanings

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>4.7</td>
<td>4.7</td>
<td>0.08</td>
</tr>
<tr>
<td>Sex</td>
<td>1</td>
<td>1.88</td>
<td>1.88</td>
<td>0.03</td>
</tr>
<tr>
<td>Treatment x Sex</td>
<td>1</td>
<td>5.53</td>
<td>5.53</td>
<td>0.10</td>
</tr>
<tr>
<td>Within Cells (Error)</td>
<td>27</td>
<td>1507.76</td>
<td>55.84</td>
<td>******</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>1519.87</td>
<td>*****</td>
<td>*****</td>
</tr>
</tbody>
</table>

Crit. F (30) - 5.63, \( p < .05 \)

Hypothesis four stated that there was no significant difference between male and female subjects' ability to attach meaning to sight words. The calculated \( F \) at 0.03 shown in Table 2 was not statistically significant since the critical value was 5.63 at the .05 level. Therefore, the findings failed to reject the null hypothesis.

Although a hypothesis was not formulated for the treatment by sex interaction, it can be concluded from Table 1 that there was no
differential effect in the treatment/sex interaction. The calculated F was 0.28 with 5.63 as the critical value at the .05 level of significance.

Table 3 shows the response distribution on the attitude scale. Questions one and two were stated in a positive form while questions three and four were stated in a negative form (Appendix B).

Table 3
Response Distribution on Attitude Scale

<table>
<thead>
<tr>
<th>Item No.</th>
<th>% of Response</th>
<th>Weighted Mean</th>
<th>Item No.</th>
<th>% of Response</th>
<th>Weighted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4 3 2 1</td>
<td></td>
<td></td>
<td>4 3 2 1</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>81 6 6 6</td>
<td>22.5</td>
<td>1</td>
<td>53 13 13 20</td>
<td>19.8</td>
</tr>
<tr>
<td>2</td>
<td>44 38 6 13</td>
<td>19.7</td>
<td>2</td>
<td>53 40 -- 7</td>
<td>22.6</td>
</tr>
<tr>
<td></td>
<td>1 2 3 4</td>
<td></td>
<td></td>
<td>1 2 3 4</td>
<td></td>
</tr>
<tr>
<td>3*</td>
<td>19 19 13 50</td>
<td>18.5</td>
<td>3</td>
<td>7 27 20 47</td>
<td>20.6</td>
</tr>
<tr>
<td>4*</td>
<td>19 19 38 25</td>
<td>16.9</td>
<td>4</td>
<td>27 7 13 53</td>
<td>19.5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>77.6</td>
<td></td>
<td></td>
<td>82.5</td>
</tr>
</tbody>
</table>

*Responses three and four reverse in value
Sentence Group N=15
Drawing Group N=16

The fifth null hypothesis stated there was no significant difference on the attitude scales between the two groups. A questionnaire was given to each treatment group measuring their attitude toward their particular method of vocabulary instruction. A t test for independent means was calculated and found to be 0.24 (Table 4). The
critical $t$ at the .05 level and a two-tailed test is 2.045. Therefore, the null hypothesis was not rejected since there was no significant difference between the two groups on attitude toward the treatments.

Table 4

Differences in Attitude Between Drawing Group and Sentence Group

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Drawing Group</th>
<th>Sentence Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted Means</td>
<td>77.6</td>
<td>82.5</td>
</tr>
<tr>
<td>$t$ ratio</td>
<td>0.24</td>
<td></td>
</tr>
</tbody>
</table>

$t (30) = 2.045 \ p < .05$

**Summary**

The findings of the study indicated there was no significant difference between a drawing approach or a more traditional approach to teaching sight vocabulary. Both approaches appeared to be methods that successfully taught sight vocabulary.

The findings from the attitude scale suggested no significant differences in second graders' attitude to a drawing or traditional approach in learning sight vocabulary. Each group responded favorably to the method of teaching sight vocabulary.
Chapter V

Conclusions and Implications

Purpose of the Study

This study investigated the effect of a self-generated drawing method versus a more traditional method of teaching sight vocabulary. A word identification and word maze posttest along with an attitude scale were administered to compare data from both teaching methods.

Conclusions

The results of the data indicate no significant differences between the two methods of teaching sight vocabulary on either the sight word identification test or the sight word maze test. Results on the attitude scale also indicated no significant difference in attitude toward either vocabulary method.

Both methods appeared to effectively teach sight vocabulary. A high percentage of the self-generated drawing group indicated on the attitude scale that they enjoyed doing the drawings and felt they learned the words easier by this method. The sentence group responded equally as favorable to the method of vocabulary development presented in this group.

Implications for Classroom Use

A self-generated drawing method to develop sight vocabulary can readily be implemented in the classroom with the same goal as
the language experience approach to teaching vocabulary which is to use as a base each child's personal experiences.

The self-generated drawing method provides an interesting alternative to the many different ways of teaching vocabulary. Also, this particular method may indicate a child's particular modality preference which can direct the teacher towards using appropriate strategies for teaching certain word meanings and concepts.

The drawing method may provide the teacher clues to a child's readiness to reading. Research has indicated that children not using horizontality or using the line to express symbols may not be at the necessary developmental stage to use left to right orientation or perceive words as symbols (Brittain, 1979; Platt, 1977).

This method of teaching language may also aid a child to develop the conceptual level necessary to successful reading. Researchers have indicated that drawing and intelligence follow the same stages in developmental growth. Many researchers have suggested it may be necessary for children to draw their ideas before writing or verbalizing them (Davis, 1977; Fillmer & de Kane, 1980; Goodenough, 1926; Kellogg, 1967; Platt, 1977; Samples, 1977).

The self-generated drawing method can conceivably provide children the means of successful experiences to early learning. A drawing method may assist a teacher in motivating children's interest in language.
Another possible use of a drawing method is in the area of developing independent thinking and encouraging children to set their own learning goals.

Finally, the main goal of any educator is to develop language as the means to communication. As Fillmer and de Kane (1980) have indicated, the use of drawing and art may facilitate this goal.

**Implications for Research**

The self-generated drawing method could be evolved into a total reading program and compared to a more traditional basal program. For instance, the art and sentences the children develop in an art and reading program could be made into books or cards with children sharing with each other their ideas and art work.

Also, a longitudinal study could be conducted comparing the self-generated drawing method compared to a traditional method of teaching sight vocabulary. A study of this type would comprise kindergarten to second grade classes with the control group learning sight vocabulary in a traditional manner.

Research could compare Platt's (1977) method of vocabulary development to the self-generated drawing method. Platt's method of teaching vocabulary was more child-directed. Her method had children drawing first and then labeling their drawings. In the self-generated drawing method, while involving child-directed experiences, vocabulary was teacher-directed.

Silverston's (1974) intersensory transfer approach to teaching vocabulary might be examined further compared with a drawing method
of teaching vocabulary. Silverston's approach attempts to include as many learning modes as possible in learning new words. Both this approach and the drawing method attempt to involve the interaction of the visual, kinesthetic, and auditory learning modes in learning vocabulary.

**Summary**

The basic goal of this study was to determine the effectiveness of self-generated drawings versus a traditional method of teaching sight vocabulary. The analysis of data indicated no significant difference between the two methods of vocabulary instruction.

Statistics from the sight word identification test and the sight word maze test demonstrated successful learning of most of the sight words through either method.

Previous research revealed a need for child-centered learning as a means of developing creativity and integration of learning basic skills and concepts needed for reading. The literature reviewed strongly urged the use of the arts to aid in the development of creativity and integration with the total educational process. The importance of art education was not in what the child produced but the process the child had undergone in developing the product.

The self-generated drawing method of teaching vocabulary may aid the integrating of a child's background experiences with learning vocabulary. The drawing method can be used as an alternative method or in conjunction with other vocabulary developing strategies.
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Appendix A

Screening Tests for Flashed Sight Words and

Sight Word Maze Test
<table>
<thead>
<tr>
<th>Sight Word Screening Test</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>body</td>
<td>however</td>
</tr>
<tr>
<td>perhaps</td>
<td>public</td>
</tr>
<tr>
<td>whom</td>
<td>lie</td>
</tr>
<tr>
<td>appear</td>
<td>result</td>
</tr>
<tr>
<td>system</td>
<td>condition</td>
</tr>
<tr>
<td>interest</td>
<td>course</td>
</tr>
<tr>
<td>increase</td>
<td>supple</td>
</tr>
<tr>
<td>consider</td>
<td>continue</td>
</tr>
<tr>
<td>beautify</td>
<td>accident</td>
</tr>
<tr>
<td>apiece</td>
<td>arise</td>
</tr>
<tr>
<td>avenue</td>
<td>badge</td>
</tr>
<tr>
<td>beefsteak</td>
<td>boast</td>
</tr>
<tr>
<td>cabinet</td>
<td>candlestick</td>
</tr>
<tr>
<td>appear</td>
<td>arithmetic</td>
</tr>
<tr>
<td>baa</td>
<td>bathe</td>
</tr>
<tr>
<td>butterscotch</td>
<td>ceiling</td>
</tr>
<tr>
<td>afar</td>
<td>aim</td>
</tr>
<tr>
<td>babe</td>
<td>bedbug</td>
</tr>
<tr>
<td>billboard</td>
<td>bother</td>
</tr>
<tr>
<td>canoe</td>
<td>china</td>
</tr>
<tr>
<td>against</td>
<td>alligator</td>
</tr>
<tr>
<td>attack</td>
<td>autumn</td>
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<td>canary</td>
<td>canyon</td>
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<td>cocoon</td>
<td>deposit</td>
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<tr>
<td>flood</td>
<td>freight</td>
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<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>grocery</td>
<td>haircut</td>
</tr>
<tr>
<td>platform</td>
<td>destroy</td>
</tr>
<tr>
<td>fortune</td>
<td>fret</td>
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<tr>
<td>gleam</td>
<td>grove</td>
</tr>
<tr>
<td>however</td>
<td>journey</td>
</tr>
<tr>
<td>onion</td>
<td>prune</td>
</tr>
<tr>
<td>figure</td>
<td>cause</td>
</tr>
<tr>
<td>company</td>
<td>question</td>
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<tr>
<td>speak</td>
<td>thousand</td>
</tr>
<tr>
<td>several</td>
<td>enough</td>
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<td>national</td>
<td>certain</td>
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<td>though</td>
<td>chance</td>
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<td>husband</td>
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<tr>
<td>remain</td>
<td>against</td>
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<td>acre</td>
<td>allow</td>
</tr>
<tr>
<td>arrange</td>
<td>attention</td>
</tr>
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<td>behave</td>
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<td>butt</td>
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<td>carpet</td>
<td>account</td>
</tr>
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<td>arrive</td>
<td>author</td>
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<td>believe</td>
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<td>ache</td>
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<td>alarm</td>
<td>automobile</td>
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<td>beggar</td>
<td>beneath</td>
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<tr>
<td>bury</td>
<td>canal</td>
</tr>
</tbody>
</table>
coconut  accept
anger    arose
bracelet business
castle   cheap
electric fairy
gingerbread gobble
handkerchief nibble
eyebrow   flutter
furniture gasoline
hairpin   handwriting
locomotive multiply
railroad  divide
empty    facing
fare      firearm
fountain fried
further   guard
harbor    honeybee
naughty   orchard
rough     dwarf
envelope  faint
fashion   gallop
glove     gunpowder
halt      hasty
height    ivory
lemonade  mischief
perfume   rubbish
straight
waterproof
yolk
youngster

uniform
weary
wicked
watermelon
Sight Word Maze Test

Name_____________________

1. Sally has a thin _________.
   canal author figure

2. The accident made _________ news.
   acre national accept

3. Tom was allowed to play ball, even _________ his homework
   was not finished.
   accept though behave

4. The farmer always said his horse acted like a _________.
   anger human interest

5. Let the flowers _________ on the table.
   remain arise fret

6. The man decided to buy the _________ of land.
   flood freight acre

7. Anne will _________ the flowers.
   arrange journey halt

8. The package will _________ today.
   believe arrive arrange

9. We had a fire in our house, and the fire _________ started
   ringing.
   flutter attention alarm

10. A _________ asked for a dime.
    business beggar bracelet

11. The puppy began to dig a hole so he could _________ the bone.
    bury arrange cause
12. The monkey dropped the ________ onto the elephant's head.
    orchard    coconut    wicked

13. Cindy was wearing a ________ made from yarn and beads.
    bracelet    banjo    gingerbread

14. The storm was very bad and the ________ lights went out.
    national    electric    furniture

15. All children decided to make ________ men for their special project.
    height    mischief    gingerbread

16. The little girl wore a red ________ on her head.
    locomotive    handkerchief    envelope

17. My mother decided to move all the ________ in the house.
    furniture    beautiful    uniform

18. With a huff and a puff, the ________ slowly went up the hill.
    envelope    fountain    locomotive

19. The ball rolling into the street was the ________ for the accident.
    cause    business    interest

20. The truck was filled with a ________ shiny apples.
    grocery    watermelon    thousand

21. Mrs. Smith was ________ she saw two men.
    increase    certain    apiece

22. Jim took a ________ and won the game.
    chance    flutter    coconut
23. The woman took her ________ out to dinner.
   bother          avenue          husband
24. The red ball rolled ________ the wall.
   arrive          against         height
25. Mrs. Smith does not ________ us to yell in school.
   allow           multiply        further
26. Everyone in the room gave their ________ to the speaker.
   flutter         attention       arrange
27. The young mother told her children to ________ themselves
   while playing.
   divide          human           behave
28. Jeff opened a new ________ at the store.
   account         alarm           bracelet
29. Everyone was pleased the ________ came to speak to the
   class.
   business        author          harbor
30. The little boy complained of an ________ in his stomach.
   acre            coconut         ache
31. The brand new ________ rolled down the street.
   automobile      handwriting     fashion
32. The noise came from ________ the floor.
   beneath         flutter         further
33. There are many boats on the ________.
   bury            canal           gunpowder
34. Tom will ________ the award.
   arrive          cause           accept
35. The little old man ________ slowly from bed.
   arose       halt       prune

36. The young man spent all his time running his ________.
   continue    acre       business

37. The butterfly moved with only a slow ________ of wings.
   electric    flutter    naughtly

38. In the Spring, the flowers will quickly ________.
   uniform     multiply    cause

39. If it does not rain tomorrow, ________ we can go swimming.
   perhaps     arise       though

40. To ________ was the letter addressed?
   national    certain     whom

41. Jake will take the cake and ________ it into two pieces.
   further     divide      avenue

42. Maybe the rabbit will ________ tomorrow.
   appear      interest    account

43. I have a ________ for studying my spelling words.
   halt        canyon     system

44. Mack collects stamps and he tries to share this ________
    with his friends.
   electric    interest    badge

45. Sarah practices the piano daily in an effort to ________
    her skill.
   increase    fortune     firearm
46. I will carefully ________ which book to read.
   autumn   business   consider

47. The bright curtains helped to ________ the room.
   journey   beautify   condition

48. The apples were a quarter ________.
   freight   apiece   account

49. The runners jogged down the wide ________.
   chance   deposit   avenue

50. The children had ________ for dinner.
   fortune   beefsteak   supple

51. The door to the ________ was stuck.
   cabinet   badge   destroy

52. The mountain top could be seen from ________.
   public   afar   behave

53. A ________ lay sleeping on the bed.
   prune   whom   babe

54. The men lowered the ________ into the water.
   canoe   bracelet   acre

55. The kitten tried to ________ the mouse.
   against   hasty   attack

56. The ________ sang all day.
   ivory   cocoon   canary

57. The butterfly finally left its ________.
   furniture   cocoon   journey

58. The rain may start a ________.
   flood   locomotive   beggar
59. This ________ store stays open all night.
    autumn    grocery    course
60. Henry keeps his ________ in the bank.
    handkerchief    system    fortune
61. The stew needed just a little more ________.
    flutter    canal    onion
62. The ________ will be invited next week to see the show.
    husband    canary    public
63. The rain started at noon and as a ________ the game was not played.
    certain    result    alarm
64. When winter is over, the ________ of the road is poor.
    condition    multiply    figure
65. Next week the golf ________ will be opened.
    divide    system    course
66. The dancer had a ________ body.
    supple    further    height
67. Judy will get good grades only if she will ________ to study hard.
    straight    continue    rubbish
68. My father had an ________ because I left the toy car on the stairs.
    accident    destroy    business
69. I will ________ early in the morning to go fishing.
    avenue    arise    flutter
70. The girl scout earned a _________.
   badge          ache          author

71. The ________ slowly burned down.
   handkerchief  beautify       candlestick

72. Matt finished all of his _________ on time.
   attention      arithmetic    thousand

73. It was Jim's turn to ________ the dog.
   cocoon         bathe          badge

74. The fly walked across the _________.
   further        ceiling        hasty

75. Please do not _________ Tina while she is doing her homework.
   bother         appear         condition

76. All of the trees lose their leaves in the _________.
   gunpowder      mischief       autumn

77. The horses were kept in the _________.
   canyon         fountain       coconut

78. The bank will let you _________ your money.
   attack         deposit        allow

79. The truck carried too much _________.
   canary          freight        candlestick

80. The robbers will _________ all clues leading back to them.
   flood           increase       destroy

81. Jan was in a _________ because she had lost her money.
   fret            acre           business
82. The boy and dog finally came to the end of their ______________.
    accident    interest    journey

83. The old man will __________ the bushes tomorrow.
    prune       ceiling      rubbish

84. The birds played in the __________.
    fortune     fountain     envelope

85. The farmer told the little boy to go just a little __________
    down the road.
    hasty       further      allow

86. The boat sailed into the __________.
    remain      firearm      harbor

87. The boy was very __________ for telling a lie.
    naughty     attention    beneath

88. The wagon bounced on the __________ road.
    fried        uniform     rough

89. Put the letter in the __________.
    orchard      envelope    harbor

90. All the soldiers came to a __________.
    halt         electric    ivory

91. The tree grew to an unusual __________.
    ache         height      accident

92. The little girl brought __________ to the party.
    wicked       youngster   lemonade

93. The flowers have a sweet __________.
    perfume      attention    canal
Name

94. The road was _______ for miles.
    flutter   locomotive   straight

95. The store owner did not get angry when the _______ broke
    the window.
    though   youngster   gunpowder

96. The policeman told the robber to drop the _______.
    ache   firearm   certain

97. The children had _______ eggs for breakfast.
    fried   electric   ivory

98. The dog was told to _______ the house.
    arose   halt   guard

99. The apples grow in an _______.
    alarm   orchard   height

100. The early miners used _______ to blow up rocks.
    attention   locomotive   gunpowder

101. Jim is always too _______ when he works.
    account   hasty   fountain

102. The dress was an _______ color.
    multiply   canal   ivory

103. As usual, the puppy was into _______.
    height   mischief   attention

104. All of the old clothes were thrown onto the _______ pile.
    rubbish   though   naughty

105. All of the plants were _______ in size.
    further   uniform   beneath
106. At the end of the day, the two boys were _________ of playing.

flutter  naughty  weary

107. The old witch was very _________.

wicked  certain  rough

108. In the summer, we like to eat _________.

attention  gunpowder  watermelon
Appendix B

Sight Word Identification Test, Sight Word Maze Test

Attitude Scale for Drawing Group, and

Attitude Scale for Sentence Group
## Sight Word Identification Test

<table>
<thead>
<tr>
<th>Word</th>
<th>Word</th>
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<td>result</td>
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<tr>
<td>appear</td>
<td>mischief</td>
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<tr>
<td>canyon</td>
<td>envelope</td>
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<tr>
<td>height</td>
<td>interest</td>
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<tr>
<td>bury</td>
<td>supple</td>
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<tr>
<td>arithmetic</td>
<td>fortune</td>
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<td>whom</td>
<td>freight</td>
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<td>uniform</td>
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<tr>
<td>public</td>
<td>acre</td>
</tr>
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<td>thousand</td>
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<tr>
<td>furniture</td>
<td>system</td>
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<tr>
<td>ache</td>
<td>continue</td>
</tr>
<tr>
<td>halt</td>
<td>babe</td>
</tr>
<tr>
<td>canoe</td>
<td>lemonade</td>
</tr>
<tr>
<td>though</td>
<td>account</td>
</tr>
<tr>
<td>remain</td>
<td>firearm</td>
</tr>
<tr>
<td>flutter</td>
<td>journey</td>
</tr>
<tr>
<td>fret</td>
<td>ivory</td>
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<tr>
<td>accident</td>
<td>hasty</td>
</tr>
<tr>
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<td>destroy</td>
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<tr>
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<td>business</td>
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<tr>
<td>weary</td>
<td>deposit</td>
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<tr>
<td>rubbish</td>
<td>prune</td>
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<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>beautify</td>
<td>flood</td>
</tr>
<tr>
<td>certain</td>
<td>ceiling</td>
</tr>
<tr>
<td>multiply</td>
<td>locomotive</td>
</tr>
</tbody>
</table>
Sight Word Maze Test

1. Tom was allowed to play ball, even _________ his homework was not finished.
   accept though behave
2. Let the flowers _________ on the table.
   remain arise fret
3. The man decided to buy the _________ of land.
   flood freight acre
4. The puppy began to dig a hole so he could _________ the bone.
   bury arrange cause
5. My mother decided to move all the _________ in the house.
   furniture beautiful uniform
6. With a huff and a puff, the _________ slowly went up the hill.
   envelope fountain locomotive
7. The truck was filled with a _________ shiny apples.
   grocery watermelon thousand
8. Mrs. Smith was _________ she saw two men.
   increase certain apiece
9. Jeff opened a new _________ at the store.
   account alarm bracelet
10. Everyone was pleased the _________ came to speak to the class.
    business author harbor
11. The little boy complained of an ________ in his stomach.
   acre    coconut    ache

12. The young man spent all his time running his ________.
    continue    business    acre

13. The butterfly moved with only a slow ________ of wings.
    electric    flutter    naughty

14. In the Spring, the flowers will quickly ________.
    uniform    multiply    cause

15. To ________ was the letter addressed?
    national    certain    whom

16. Maybe the rabbit will ________ tomorrow.
    appear    interest    account

17. I have a ________ for studying my spelling words.
    halt    canyon    system

18. Mack collects stamps and he tries to share this ________
    with his friends.
    electric    interest    badge

19. Sarah practices the piano daily in an effort to ________
    her skill.
    increase    fortune    firearm

20. The bright curtains helped to ________ the room.
    journey    beautify    condition

21. The mountain top could be seen from ________.
    public    afar    behave
22. A ________ lay sleeping on the bed.

  prune  whom  babe

23. The men lowered the ________ into the water.

  canoe  bracelet  acre

24. The ________ sang all day.

  ivory  cocoon  canary

25. The rain may start a ________.

  flood  locomotive  beggar

26. Henry keeps his ________ in the bank.

  handkerchief  fortune  system

27. The ________ will be invited next week to see the show.

  husband  canary  public

28. The dancer had a ________ body.

  supple  further  height

29. The rain started at noon and as a ________, the game was not played.

  certain  result  alarm

30. When winter is over, the ________ of the road is poor.

  condition  multiply  figure

31. Judy will get good grades only if she will ________ to study hard.

  straight  rubbish  continue

32. My father had an ________ because I left the toy car on the stairs.

  accident  destroy  business
33. Matt finished all of his ________ on time.
   attention thousand arithmetic

34. The fly walked across the ________.
   further ceiling hasty

35. The horses were kept in the ________.
   canyon fountain coconut

36. The bank will let you ________ your money.
   attack allow deposit

37. The truck carried too much ________.
   freight canary candlestick

38. The robbers will ________ all clues leading back to them.
   flood destroy increase

39. Jan was in a ________ because she had lost her money.
   fret acre business

40. The boy and dog finally came to the end of their ________.
   accident journey interest

41. The old man will ________ the bushes tomorrow.
   prune ceiling rubbish

42. The boat sailed into the ________.
   remain firearm harbor

43. The boy was very ________ for telling a lie.
   attention naughty beneath

44. Put the letter in the ________.
   orchard harbor envelope
Name ______________________________

45. All the soldiers came to a ________.
   halt          electric          ivory

46. The tree grew to an unusual ________.
   ache          accident          height

47. The little girl brought ________ to the party.
   wicked        youngster         lemonade

48. The policeman told the robber to drop the ________.
   ache          firearm           certain

49. Jim is always too ________ when he works.
   hasty         account           fountain

50. The dress was an ________ color.
   multiply       canal            ivory

51. As usual, the puppy was into ________.
   height         mischief         attention

52. All of the old clothes were thrown onto the ________ pile.
   rubbish        though           naughty

53. All of the plants were ________ in size.
   further        uniform          beneath

54. At the end of the day, the two boys were ________ of playing.
   flutter        weary            naughty
Attitude Scale for Drawing Group

1. I liked to do the drawings.

very much | just a little | not very much | not at all

2. I learned the words easier by doing drawings with them.

very much | just a little | not very much | not at all

3. I did not need to draw.

very much | just a little | not very much | not at all

4. I had a hard time thinking of ideas to draw about the word.

very much | just a little | not very much | not at all

Name ________________________________
Attitude Scale for Sentence Group

Name_________________________

1. I liked writing the sentences.
   very much  just a little  not very much  not at all

2. I learned the words easier by writing sentences.
   very much  just a little  not very much  not at all

3. I did not need to write sentences.
   very much  just a little  not very much  not at all

4. I had a hard time thinking of sentences to write about the words.
   very much  just a little  not very much  not at all
Appendix C

Procedures and Materials Used in Instruction
Directions for Self-Generated Drawing Treatment

1. Hold up the flash card and say the word.
2. Everyone pronounces the word.
3. Ask the children do they know what the word means.
4. The teacher tells what the word means then shows the picture illustration of the word.
5. The teacher will then use the word in a sentence written on the board.
6. The teacher asks the students do they understand what the word means.
7. The students are given drawing paper and crayons. Have them print the word and their names at the top of the paper using their pencils.
8. The children are then asked to draw a picture illustrating that word using their crayons.
9. After finishing the picture, they are asked to put the word into a sentence at the bottom of the page. Make sure they are actually using the word in the sentence.
10. Have the children show their drawing and read their sentence.
11. Do a short flash session of the three words at the end of class.
12. Collect all drawings and place back into the folder.
13. Total time to do treatment should be 25 to 30 minutes.

Materials:

<table>
<thead>
<tr>
<th>Pencils</th>
<th>Flash cards (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crayons</td>
<td>Pictures (3)</td>
</tr>
<tr>
<td>3 sheets drawing paper</td>
<td>Cards with definitions and sample sentence</td>
</tr>
</tbody>
</table>
Directions to Sentence Group

1. Hold up the flash card and say the word.
2. Everyone pronounces the word.
3. Ask the children do they know what the word means.
4. The teacher tells the children what the word means and then shows the picture illustrating the word.
5. The teacher will then use the word in a sentence written on the board.
6. The teacher asks the students do they understand what the word means.
7. Ask the children to print the word on their paper and write a sentence using that word. Make sure they are using the word in the sentence instead of referring to the word.
8. Have the children read their sentences to the group.
9. Go on to the next word.
10. At the end of the session, use the three flash cards and go through the words once more.
11. Collect all the papers and place back into folder.

Materials:

- Pencils
- Writing paper
- Flash cards (3)
- Pictures (3)
- Cards with definitions and example sentences

Total time to do treatment should be 25 to 30 minutes
Day 5

Day 6

The Willow
by Sean Wilson
Sight Words, Definitions, and Sentence Examples Used in Self-Generated Drawing Treatment

Day 1

**envelope**—"A cover or wrapper; especially a piece of folded gummed paper for enclosing a letter."

The little girl put her letter into the envelope.

**canoe**—"a small, light, narrow boat, sharp at both ends, moved by paddles."

Tim spent several hours painting the canoe.

**furniture**—"movable articles used to furnish a room."

All the furniture in the house was new.

Day 2

**naughty**—"Behaving badly or improperly."

The cat was very naughty.

**babe**—"A baby; as a babe in arms."

The mother held the babe in her arms.

**locomotive**—"an engine that moves under its own power; especially, an engine that hauls cars on a railroad."

The locomotive went down the track.

Day 3

**journey**—"To travel from one place to another."

Homer went on a long journey.

**halt**—"To come or to bring to a stop; as, to halt the speeding car."

The car with a flat tire finally came to a halt.

**continue**—"To go on in some course; as, to continue to study."

Jeff decided to continue walking.
Day 4

**weary**--"worn out, tired; fatigued, . . ."

The little boy was weary from working in the garden.

**uniform**--"of the same form with others; alike;"

All the cakes were uniform in size.

**prune**--"To cut off the dead or unwanted branches, twigs, or parts of a bush or tree; to trim."

The gardener will prune the old maple tree today.

Day 5

**interest**--"heightened feeling accompanying special attention to something; as to show an interest in geography."

Jeff shows a keen interest in baseball.

**flutter**--"to move with a quick to-and-fro motion."

The flag began to flutter in the wind.

**acre**--"A measure of land equal to 4,840 sq. yds."

The house was built on an acre of land.

Day 6

**afar**--"at, to, or from a great distance; as to travel afar."

The kite was seen from afar.

**author**--"A person who writes something, as a book or a play."

My favorite author has a new book.

**thousand**--"one thousand units or objects."

Over a thousand trees covered the hill.
Day 7

**public---**"The people as a whole; persons in general."

The show was open to the public.

**ache---**"A continuous pain."

The boy had an ache in his back.

**fortune---**"Riches or to have a lot of money."

The man made a fortune in oil.

Day 8

**canary---**"a small yellow songbird."

The canary sang all day.

**appear---**"To come into sight, to become clear or plain; to show."

The girl will appear on television tonight.

**bury---**"to conceal; to hide; to cover up."

The pirates were going to bury their treasure.

Day 9

**firearm---**"Any small weapon whose shot is discharged by an explosive."

The man found a small firearm.

**result---**"To come about as an effect."

The little boy was bad and as a result, he did not get to go outside and play.

**rubbish---**"Anything worthless."

The boys collected huge bags of rubbish.
Day 10

**freight**—"The load of goods, or cargo, carried by a ship, train, truck, or airplane."

The ship carried freight instead of passengers.

**though**—"however, yet, in spite of the fact."

The little girl received a present even though it was not her birthday.

**deposit**—"to place for safekeeping; especially to put money in the bank."

Jane will deposit her check at the bank.

Day 11

**supple**—"flexible, bends easily."

The belt was made from supple leather.

**ceiling**—"The overhead inside lining or finish of a room."

There was only one light on the ceiling.

**condition**—"fitness"

After he played in the puddle, his shoes were in bad condition.

Day 12

**canyon**—"A deep valley with high, steep slopes."

The two boys camped inside a canyon.

**fret**—"to worry; to be irritated."

My mother was in a fret because her cake fell.

**certain**—"being sure about something."

The dog was certain his bone was buried here.
Day 13

hasty—"hurried, done or made quickly."

Jane realized she had been too hasty when she bought the jacket.

arithmetic—"adding, subtracting, multiplying, and dividing by the use of figures."

The wise old owl could quickly do arithmetic in his head.

multiply—"To increase in number, to make or become more numerous."

Due to good weather, the crowd at the fair began to multiply.

Day 14

mischief—"To annoy or tease, or conduct that causes trouble."

The baby was always into mischief.

ivory—"The color of ivory, a pale, creamy color or yellowed white."

The ivory flowers sit on the table.

remain—"To be left after something else or others have been removed."

The rocks can remain by the building for now.

Day 15

destroy—"to put an end to; to do away with."

The hot sun may wilt the garden and destroy it.

account—"A record of the things a customer has bought and of the money he owes for them."

Sarah found a mistake in her account.

beautify—"to make beautiful."

The new rug will beautify the room.
Day 16

accident—"Something that happens unexpectedly, chance."

The car was in an accident.

business—"A commercial enterprise of any kind. Something that takes a person's time, attention, or effort."

He owns a drycleaning business.

lemonade—"A drink made of lemon juice, sugar, and water."

The boy was selling lemonade.

Day 17

flood—"A great flood of water that rises and spreads over the land."

The dam broke causing a flood.

whom—"The form of the word who—who you are referring to."

To whom did you give the letter?

height—"The highest point. The measure of an object from its base to its top."

The tree grew to an unusual height.

Day 18

increase—"To make or become greater, in size, value, number, etc."

Tim knows that if he will practice, he will increase his swimming ability.

harbor—"part of a body of water, as a sea or lake, so protected as to be a place of safety for ships; a port."

We took the boat to the harbor.

system—"a method of arranging or regular method or order."

Sally's system for cleaning her room is to pick up her clothes first.
Appendix D

Samples from the Study of the Children's Art Work
uniform

All the pencils were uniform in size.
Prune

my mom will prune the bush.
I am going to prune the weeds.
All my trees are uniform together.
all the wagons are uniform,
The men are in uniform.
They are uniforms.
He was weary of driving.
The girl is mowing the lawn and she is weary from mowing lawn.
The man is weary because he has to rake the grass.
The man is weary of the rain.