A study investigated the feasibility of presenting to primary-grade children a holistic, functional language arts program instead of a subskill one. Over 1,000 children from 16 inner city elementary schools were divided into three groups: (1) Group A, taught by teachers trained in holistic and language oriented approaches to reading and writing, who helped write the curriculum manuals; (2) Group B, taught by teachers who implemented the manuals; (3) and Group C, a control group. The children were tested three times a year on their ability to write a composition and read passages at increasing readability levels. In writing, results indicated that Group A kindergarten and first grade students performed significantly better than the other groups, but not at the second and third grade levels. In reading, Group A students achieved more in the ability to comprehend silent reading material at increasing levels of difficulty than Group B or Group C at the first and second grade levels and did as well as the other students at the third grade level. The findings indicate that a holistic curriculum appears to be most effective for kindergarten and first and second graders and that a rapid gain in the ability to write a meaningful composition occurred in the Group A kindergarten and first grade children. (EL)
Research Report

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Title: How a Holistic Language Arts Curriculum Influenced the Reading and Writing Proficiency of Kindergarten and Primary Grade Children

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The purpose of this paper is twofold. First, it will discuss the feasibility of presenting primary-grade children a holistic language arts curriculum instead of a sub-skill one. Secondly, it will present information and data from a curriculum project in which inner-city children from grades K-3 were immersed in a holistic, functional language arts program from the onset of school in September to the closing days of June. Discussion of how the holistic curriculum for listening, speaking, reading, and writing came into being and how the results of the year's project turned out may provide valuable information for those schools and districts who are considering such a curriculum venture themselves.

Before the project itself can be discussed, the notion of "holistic" and its essential core needs to be explored. The holistic approach to language arts instruction essentially advocates beginning with a larger unit of language and moving to smaller units while the subskill or parts approach proposes to begin with the smallest or smaller units of language, gradually moving to larger and more complex units. Notice that each approach recognizes the whole and its related parts. A major feature distinguishing the approaches, especially during the beginning stages of written literacy learning, is that of the sequencing of instruction. According to Samuels (1980), this means looking at which tasks and which unit size teachers would use to start instruction and how programs and skill sequences would be implemented as students increase in skills.
Text and test publishers may have indeed taken a good hard look at the subskills approach to written literacy learning to note how much easier and profitable it is to publish at that level rather than at a holistic one. For instance, a beginning reading program can be based on the learning of the 140 or so phoneme/grapheme relationships that exist in the English language before words, sentences or meaningful stories are read. A beginning writing program can focus on the mastery of producing the alphabet letters and on the spelling of limitless words before even the idea of story or sentence production is begun.

By the same token, teachers may unwittingly support the subskill approach rather than directly immerse students in holistic language learning. How often have you heard renditions of the poor-basics-acquisition chain? The college teacher will say, "These students can't express ideas in any logical, coherent way." The high school teacher laments, "How can I teach composition when my students can't even write a sentence?" The junior high and middle grade teachers bemoan the fact that students can't spell or read words properly. These comments suggest that teachers are focusing on the parts rather than on mastery of the whole. A more important concern may well be a functional one as well... that is by immersion in a holistic language arts program, the parts become more relevant, unnecessary to teach, because they are embedded in a larger whole.

However, holistic language arts learning is more than the sequencing of instruction notion expressed by Samuels (1980). There are three more essential components that influence the very way
children will learn to think and how to express themselves as they progress through the grades. These components focus on the nature of meaning within language expression, the nature of thinking through language, and the social, functional way language is used by the human species.

Moffett and Wagner (1983) use the term "discourse" to designate a whole unit of language used for a specific purpose. A discourse then could be a conversation, a lecture, a letter or journal, a poem, a short story, a composition, an ad, or even a label on a particular product. It is the largest unit of language in which a complete message exists between the sender or receiver. Thus, the "show-and-tell" activity of primary grade children represents a complete, language context while for a group of 11th graders in an electronics class, a line drawing representing a circuit communicates a whole nonverbal discourse, immediately comprehended by all who have the relevant schema.

Within the holistic view of language learning, composing and comprehending words, sentences, and paragraphs should be done within the context of a complete discourse. When substructures alone are used as learning units, readers and writers lose a sense of relevance and connectedness with the overall purpose of the message. If discourse is the superstructure of the communication context existing amongst sender-receiver-message, the paragraph, the sentence, and finally the word itself with its letters, syllables, phonemes, morphemes, and affixes are the substructures within. The paragraph or stanza, like the other substructures, is governed by the kind of discourse in which it is a part. This means that the number, sequence, and composition of paragraphs depend upon the discourse mode
in which they occur and on the particular intent of the communication situation.

Sentences will also vary in style and complexity according to the kind of paragraphs in which they are used. Sentence structure is the set of relations amongst the words within the paragraph. Sentence level relationships are governed by the rules of grammar which consist of word function, word order, and word endings. Moreover, the structure of any given sentence governs the structure of each word within that sentence and how it will be punctuated. Thus, individual word meanings are dependent upon their locale in the sentence of which they are a part, and individual sentence meanings are dependent upon the paragraph in which they are a part, and individual paragraph meanings are dependent upon the total intent of the written discourse.

The very way young children are conditioned to think is influenced by the way language instruction is brought to them. The type of thinking encouraged in a holistic approach is that of synthesis. This mode of thinking contrasts with that of analysis which is generated through a parts-specific approach to language instruction, particularly early reading and writing instruction. During analysis, separation occurs such as when a word is broken into its component parts or when a sentence is analyzed to determine the names of the functional parts. The rationale for analysis is that after repeated attempts of decoding words or analyzing sentences, students will learn how to read new words and write original sentences on their own. But, if one listens to the complaints of teachers as was noted earlier, continued preoccupation with analysis has not yielded literacy success at the upper-grade levels.
Synthesis, on the other hand, requires a search for connectedness on the part of the student. It becomes a discovery of the nature of relations among different things. This thinking occurs, for instance, during the reading of a narrative work in which the reader sees how characters and plots interact with one another to bring a sense of enjoyment and fulfillment in the story design. It occurs during writing when the writer composes sentences with particular word arrangements that convey the message the writer is visualizing. Synthesis requires the higher thought processes of evaluation, justification, classifying, grouping, and perceiving how things are alike or different. The individual thinker must perceive how parts are joined, related, or different without being told that they are so.

The Swiss Psychologist, Jean Piaget, realized that a key aspect of children's learning was for them to use their own innate, active intelligence rather than to act on someone else's directions and approaches to learning. His insight regarding the power of children's thinking was that error making was part of the learning process. This notion has been seconded by Roger Shuy (1981) in his discussion of how children learn to write for meaning. He noted that there is no way to learn a language without being wrong in it and without being allowed to be incorrect in it as one learns the right forms. A fallacy in the teaching of writing in particular is that error making during the initial stages of writing is regarded as a lack of knowledge of language understanding. Teachers have difficulty, therefore, separating the knowledge to be gained about
students' levels of proficiency through the use of written language forms from considering the child as deficient in language usage.

Synthesis is a powerful thought process because in each discovery of relation or in each creation of structure such as a sentence, a composition, a drawing, a play, or a graphic design, the individual gives something of his or her self. The idea is not there until it is intuitively perceived or insightfully discovered. Teachers can point out how a combination of sounds made a word, how the combination of functional parts make a sentence, or how many key episodes there are in a story, but the meaning and relationship of each part to the whole is not there until it is synthesized by each student. The visualization of relations and the flashes of insight that occur during synthesis are functions of right-brain thinking (Sinatra & Stahl-Gemake, 1983).

Thus, a key thinking style conditioned by a holistic language arts curriculum is that it encourages whole brain functioning. The right hemisphere of the brain is stimulated to visualize the whole and the relations of parts to the whole while the left will name and sequence the language parts that will be used to describe the whole. Henry (1974), who has written extensively on the dichotomy between the thinking modes of synthesis and analysis, points out the pervasive power of synthesis. He notes that synthesis supercedes and embodies analysis when a design or overall structure has to be invented to incorporate all the parts or separate relations of a work. Global comprehension and creation of verbal and nonverbal works occur at the whole discourse level. It is at this level where essential meaning is grasped holistically as synthesis occurs to
establish relationships. Furthermore, it is also at this level where affective commitment in the form of emotions, biases, attitudes, are tied to the meaning transmitted through the message.

A third consideration for the need of holistic emphasis in language learning is contributed by Shuy (1981). He stressed not only the language environment in which the learner actively constructs linguistic competence through such thinking as synthesis but also the social context. That is, teaching within an area of parts such as decoding in reading should occur within the meaningful whole of comprehension and within a real social environment. His sociolinguistic competence model highlights the functions more than the forms of language. Thus, the social context - how language will be used in real social language interaction - becomes another key issue of holistic.

Implementing a Primary Grade Holistic Curriculum

A curriculum project was initiated in the early 1980's by the Curriculum and Instruction Division of the New York City Public Schools. This agency had direct instructional impact into more than 600 of the city's elementary schools. The focus of the curriculum project was essentially to determine the efficacy of a holistic language arts curriculum upon primary-grade children. The project was implemented over a three-year period in the following way: the first year was devoted to establishing the philosophy, goals, and curriculum objectives to implement the project in grades kindergarten to third grade; the second year was devoted to implementing the curriculum in the four grades and to developing curricula for grades four and five; and the third year was concerned with implementing
the project in grades four and five, continuing the refinement of
the curriculum in kindergarten to grades three, and to developing
the holistic curriculum for grade six. This manuscript will focus
on the events of the first two years.

These events may be sequenced in the following way in providing
a conceptual framework for the development and implementation of the
project:

1. Establishing the philosophy and curriculum objectives
   through professional consulting input;
2. Interacting with and training the teachers who were
   to teach kindergarten through third grade children
during the school year (the project's second year);
3. Developing the holistic curriculum materials for each
   of the four language arts areas in the four grades, and
4. Assessing the project during the year of implementation
   in kindergarten through grade three.

Let's examine briefly the theorizing and philosophical problems that
occurred during each sequence and how implementation occurred to
achieve some rather gratifying results. During the first year, a
number of professional educators from colleges and universities in
the New York City area were invited to participate in the project
in a consultative role. The major charge to this group was to
achieve the overall philosophy and the levels of curriculum objectives
for the project prior to the training of the teachers which would
occur during the summer months. This was no small undertaking since
curriculum objectives were needed in each of the four language arts
areas of listening, speaking, reading, and writing.

How the group of 5 to 8 consultants and project implementors
worked is an important consideration for the curriculum specialist. During the early stages of meetings, the group found themselves hacking away at specific objectives important for achievement in each of the four areas. Generally, these objectives were parts specific. That is, following the organization of many curriculum textbooks and guides on the marketplace, the group wrote objectives for primitive parts, for next basic parts, for more integrative parts, and finally for more global parts. For example, early objectives in both listening and reading were being able to distinguish specific phonemes and graphemes, being able to distinguish meanings of words when heard or read, being able to understand meaning of sentences, then paragraphs, etc. After some weeks of part-specific thinking, the group collectively came to the major realization that a holistic curriculum project needed a holistic theoretical base and a holistic sequencing of objectives.

By the late spring of the first year the following major objectives were accomplished in the curriculum conceptualization:

1. Curriculum objectives would be written in their broadest terms and would be universal for the English speaking population, no matter what the age or grade level. For instance, the first major objective in the oral language strand was that students would be able to understand stories told to them and would be able to retell these stories. By such wording, the objective was globally conceived for all grade levels and need not be re-conceived or rewritten each year that the project was implemented at a higher grade level.
2. Rather than quarter the language arts curriculum into the traditional four components of Listening, Speaking, Reading, and Writing with separate objectives written for each, the curriculum was divided into two strands reflecting the oral and written reception and production of language. This conceptualization of a strand entitled Reading and Writing: Understanding and Constructing Written Texts and a strand for Listening and Speaking: Understanding and Expressing Spoken Language was supported by the language arts conceptualization of Moffett and Wagner (1983).

That reading and writing were seen in the field as being mutually compatible in mental processing and reflective of two sides of the same coin abounded in the literature of the early 1980's in such titles as: "The Role of Writing in Developmental Reading" (Stotsky, 1982), "How Reading Affects Children's Writing" (Eckhoff, 1983), "Toward a Composing Model of Reading" (Tierney and Pearson, 1983), "Writing and the Teaching of Reading" (Wittrock, 1983), "Composing and Comprehending: Two sides of the Same Basic Process" (Squire, 1983), and "Research on reading/writing relationships: A synthesis and suggested direction" (Stotsky, 1983).

This joining of listening and speaking in the oral language strand and reading and writing in the written strand allowed for meaningful, holistic, and realistically realizable objectives to be formulated. For instance a major objective
in the Listening/Speaking strand was "Students will be able to sequence oral messages and enact them accurately such as when following directions and planning activities."

A major objective in the Reading/Writing strand was, "to understand the most important ideas in a written text and construct written passages based on a central theme."

3. Within each of the two strands, a major conceptual strategy in reflecting the real meaning of holistic was to present the objectives for the most global manifestation of the language strand first. Thus, in the Reading/Writing strand, the objectives concerned with understanding and writing paragraphs, compositions, reports, and poems were to be achieved before or concomitantly with objectives concerned with sentence level understanding and production and word level understanding and writing. In fact, the last listed objective in the entire Reading/Writing strand was the one usually found first in most literacy series and curriculum guides. That objective was globally expressed as the ability to "understand and use sound-symbol relationships."

This conceptualization of focusing upon whole discourse level understanding and production before sentence level and then word level understanding and production was reflected on both the teacher training component and the curriculum writing. The subsequent curriculum guides produced for each of the four grade levels by the teachers engaged in the project were organized around meaningful themes appropriate for the children's experience level.
4. The curriculum would be assessed through a holistic evaluation of children's performance in reading and writing. The project coordinators felt that it would be more feasible to assess the effects of both strands of the holistic curriculum through the reading and writing mode although a number of ways to assess the listening/speaking mode were also examined. However, no holistic assessment procedure other than the individual performance of singular children during a story listening or story telling task was considered to be workable. Due to the time and design constraints necessary for individual listening/speaking performance, it was decided not to assess through those language modes.

Children in grades one through three would be evaluated holistically in reading by answering a series of questions on paragraphs of increasing readability levels. Youngsters in grades kindergarten through third would be evaluated holistically in writing by holistic ratings of their compositions by three trained raters who were hired independently of the project. The precedence of holistic evaluation had been implemented a few years earlier by the New York State Education Department. Before a student could graduate high school, he/she needed to demonstrate a minimum competency of 65% mastery in the essential skill areas of reading, writing, and arithmetic. Particularly in the area of writing, a holistic scoring procedure was used (University of the State of New York, 1980) in which raters or judges read three different types of discourse produced by a student.
and assigned the student a holistic writing score based on a scale of 0 to 100 percent.

The second major project component was the training of the teachers. The project directors and consultants interacted with the teachers for six weeks during the summer before the project would be implemented in grades kindergarten through three. Most of the teachers, primarily recruited from one of the city's 30 school districts, would become the experimental teachers in grades K-3 through the project year. The purposes of the summer training component was to train the teachers in the nature of holistic, to get their inputs into the strand objectives produced by the consultants, and to begin the actual writing of the lessons and activities that would accomplish the objectives.

In the early stages of the interaction, the teachers contributed a great deal to the project. They showed the project coordinators how affect and nonverbal or extra-linguistic holistic learnings were absent from the curriculum. The concerns of affect and nonverbal learnings were then included in logical places within the two language strands. For instance, within the listening/speaking strand, a major holistic objective was agreed to be that students will be able to understand and reproduce body language such as gesturing and miming. Within the reading/writing strand was added the notion that students will be able to "read" symbols and other visual forms such as graphics and pictures.

However, the major concern faced at all levels of practical implementation was the recurrent participant question, "How can we teach kindergarten and first grade children to read and write whole stories if they can't read and write words or even letters of the
alphabet?" The answer to this question slowly became resolved as the project unfolded and participants became aware that discourse-level reading and writing activities could occur as a natural extension of oral language participation.

Once the curriculum objectives or major outcomes were finalized, the teachers, working in grade level clusters, began the task of writing the curriculum implementation for each of the four grade levels. Their end product, completed during the late Fall of the year, was in the form of four bound manuals. Each manual contained three major child-centered themes through which the global outcomes would be accomplished in language experience activities. Example themes for each of the four grade levels were: for kindergarten children, "The Munchies" in which the various food groups and their nutritional values were presented; for first grade children, "When I Grow Up" in which career explorations occurred; for second grade children, "Me, Myself, and I" in which self awareness was developed by exploring students' interests and their environment; and for third grade, "The Superheroes" in which comic book heroes, heroes in literature, and the heroic aspect of the child were illuminated.

Through such global themes, language would operate in a social context and the universal outcomes would be met by involvement in a number of specific language experiences. For instance, for the grade one theme of "When I Grow Up," there were 24 separate lesson plans or activities and each of these activities had a number of specific language experiences that called for involvement of verbal and non-verbal language interaction. In the specific activity concerned with
the topic of interviewing, the first grade child learned the global outcomes that interviewing is a form of communication to gather information and that interviewing requires skills of questioning and "reading" nonverbal cues such as body language. Some of the specific language experiences involved the writing activities of listing people to be interviewed, formulating questions in writing, writing letters to celebrities to request interviewing, and documenting content of interviews.

**Evaluation Design**

Six of the summer workshop teachers who were scheduled to have kindergarten through third grade classes during the following school year were designated the Group "A" experimental participants in the project design. These teachers had received direct training in holistic and language oriented approaches to reading and writing, received on-going training during the evaluation year, and helped write the curriculum found in each of the four separate manuals. Children from the "A" participant classes would be compared with children from Group "B" and Group "C" participant groups.

Group "B" participants were composed of 14 classrooms from eight schools. The 14 teachers, at all four grade levels, implemented the manual devised by Group "A" teachers, but did not participate in the workshop training during the previous summer nor did they receive any in-service training during the project year. Their implementation consisted of immersing their classrooms in the holistic strategies as presented in themes throughout the four manuals. Generally, Group "A" and "B" teachers came from the same school district in New York City.
Group "C" participants acted as control. Fourteen classrooms in eight different schools from three additional districts in New York City were involved. These control teachers received no training via the project staff nor did they have access to the holistic language-based strategies presented in the four manuals.

In total, 34 classrooms in 16 elementary schools (public and non-public) within one borough of the city of New York participated in the project evaluation. The 34 classrooms were categorized into three groups. Grouping was largely dependent upon the project status of the classroom teacher. Over 1000 youngsters were involved in the project evaluation which was carried out three times during the year in reading and writing assessments.

To evaluate the effects of the project in writing, Kindergarten through third-grade students were assessed three times during the year (November, February, and May) in their ability to write a composition. For reading evaluation, first through third-grade students were assessed during the same three time periods in their ability to read passages at increasing readability levels. Students received a comprehension score of from one to 25, dependent upon the number of questions they answered correctly on the passages of increasing readability. The higher the score, the more difficult the reading text and the more accomplished the reader.

For writing evaluation, the November testing called for the children to write a descriptive essay on "My Favorite Place"; and at the February and May testings, they wrote on the topic, "My Favorite Person." As part of the evaluation design, random samples of test
essays were selected from among the papers at each grade level at the several testing times. Thirty-six papers were randomly selected, twelve from each of three groups. Each selected essay was scored holistically by three independent raters using a scale from 0 to 100, based on the extent to which the holistic scoring criteria were met. The criteria were established to reflect universal competency in fluent writing and dealt with the major aspects of unity, coherence, style and mechanics.

The three raters had been trained the previous summer in the holistic rating scale devised by the author. Before the project evaluation began rather high correlation coefficients had been established for the three raters for each of the four grade levels. Using compositions collected for 14 schools not involved in the project, the correlation coefficients established prior to the project were .74 for kindergarten writers, .93 for first grade writers, .85 for second grade writers, and .89 for third grade writers. During the project year, the raters continued to work on higher standards of interrater reliability. By the final May evaluation, their correlation coefficients were .95 for kindergarten, .90 for first grade, .90 for second grade, and .87 for third grade.

Project Evaluation Results

Results for reading and writing will be discussed separately for each of the four grade levels. It was found that Group "A" kindergarten children performed significantly better (p < .01) than students in Group "B" and "C". In the gains from November to the February writings, the mean gain of Group A kindergarten was extremely impressive. They
achieved 21 points greater than Group B's mean gain and 27 points
greater than Group C's. By posttest evaluation (May), Group A kinder-
gartners emerged with posttest average in holistic writing of 35 per-
cent, compared to an average of 20 percent for Group B students, and
10 percent for Group C students. The overall gain in mean writing
scores for November to May for the three groups was 34.6 points for
Group A children, 13.0 points for Group B, and 7.3 points for Group C.
These results are also interesting in that at the November Testing,
the B Group children were the better writers. They had a mean score
of 7.1 in writing as compared to 3.2 for Group A.

Group "A" first-grade children wrote significantly better
(p < .01) than children in Groups B and C during the February evalua-
tion. By the May evaluation, Group "A" youngsters still scored signifi-
cantly better (p < .01) than Group "C" youngsters, but there was no
significant difference between Groups A and B. While Group "A"
children posted the greatest mean gain in writing compared to Groups
B and C, the gain was not large enough to achieve significance over
the B Group. The overall mean gain in writing by the May evaluation
for first graders was 33.3 for Group A, 29.8 for Group B, and 19.6 for
Group C.

Group "A" second-grade children achieved significantly better
than Group "B" youngsters in writing (p < .01) for the February gains
and achieved significantly better (p < .05) in the May evaluation. There
was no significant interaction noted between Group A and C students nor
between B and C students at grade two. The mean gain in writing scores
from the November to May testings for the second graders was 17.8 for
the A Group children, 4.6 for the B Group children, and 21.3 for the
C Group children.
Among third grade students, no significant interactions were noted amongst groups. Groups A and B students achieved approximately seven and five points respectively in program gains while Group C students, who began the year with the lowest writing mean, achieved 10 points more by year’s end. Only the scores of project students present for all three reading test administrations were used in the data analysis. Reading test data were analyzed by grade, using one-way ANCOVA, with the February and May test scores serving as the dependent variables and the November test scores, as the covariate. Kindergarten youngsters were not included in the reading analysis. ANCOVA results indicated that, for first and second graders, the adjusted May scores among the three groups were significantly different. The difference between Group A and Group C first graders’ posttest scores (4.36 and 3.21) was highly significant at the \( p < .01 \) level. There was no significant difference between the A and B group children nor between the B and C group children, although the May testing unadjusted mean for the B group children was almost a full comprehension point higher than the C group children.

Group A second graders’ posttest mean score (6.21) was significantly higher (\( p < .01 \)) from both Group B’s (5.09) and Group C’s scores (4.88). There were no significant differences among the three third-grade groups’ scores or between any two third-grade groups’ scores. The November and May mean scores for all three groups were quite similar in the comprehension rating scale.
Summary of Results

The results of the writing analysis indicated that kindergarten and first-grade children with teachers who were trained and had developed the holistic curriculum manuals performed significantly better than other students. Performance of Group B students in kindergarten and first grade also improved more than that of comparison group students in both grades. Among second and third graders, the results were less positive. Although Group A students' gains were consistent, they did not perform as well as comparison group students who were not using project materials. Group B students in these grades achieved very little.

Analysis of the reading testing indicated that students in the A group achieved significantly more in the ability to comprehend silent reading material at increasing levels of difficulty than did comparison group students (Group C) at both the first and second grade levels. In addition, at the second grade level, A group students benefited more than B group students whose teachers implemented the manual provided by the Group A teachers. At third grade level, students in Group A fared as well as other students in reading performance.

Conclusions and Implications

A holistic curriculum with direct emphasis on reading and writing for meaning appears to be most effective for kindergarten, first, and second graders. Kindergarten and first-grade students whose teachers had direct training in holistic language-oriented approaches to the teaching of reading and writing gained more points on written
compositions and reading comprehension exercises than did students from other groups. Most illuminating was the rapid gain in the ability to write a meaningful composition by the kindergarten and first-grade children of the A group. Between November and February, the kindergarten and first-grade children who used written expression to naturally communicate with their peers, their teachers, and others increased in their holistic writing ability by 27 and 33 points respectively. The rise in writing ability was less dramatic for second and third graders. The A Group second graders increased by 14 points while the A Group third graders only by 3 points. Since no significant effects emerged at the third grade level for the experimental or manual groups, a need exists to examine the staff development aspect of the project in ways to implement holistic approaches to reading and writing for older children.
REFERENCES


