This review of the historical literature in language development focuses on the characteristics and development of written language, noting that since writing was considered a school function associated with prescribed sequential instruction, few investigations were conducted during the stages of initial growth in writing competency. Also noted is that studies of primary-grade children's writing were limited during the initial stages of the development of writing ability because of difficulties attributed to controlling factors of child development generally and the development of writing ability particularly. The historical review includes studies at both primary and intermediate grades. Contains 67 references of research published between 1926 and 1969. (NKA)
HISTORICAL RESEARCH SUMMARY #2
(1900-1970)
The Characteristics and Development of Written Language

April 1998

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BEST COPY AVAILABLE
RESEARCH SUMMARY #2
Characteristics of Written Language

Introduction

The review of the historical literature in language development now turns from the characteristics and development of oral language (Historical Research Summary #1) to the characteristics and development of written language.

Studies of primary-grade children's writing were limited during the initial stages of the development of writing ability because of difficulties attributed to controlling factors of child development generally and the development of writing ability particularly.

Since writing was considered a school function associated with prescribed sequential instruction, few investigations were conducted during the stages of initial growth in writing competency.

At higher levels, research was limited because of a lack of "security of pure knowledge" similar to basic research in other fields (West 1967). The historical review includes studies at both primary and intermediate grades.

School Entry and the Developmental Task

A significant finding of the early studies of children's oral language indicates that they are potentially capable of writing using the structure of adult grammar, observed in the pattern of word selection of children even at age three. The fact that children (1960-70) use longer responses and fewer one-word responses than did children of three to eight years of age twenty to thirty years earlier is also a significant factor in expectations of their writing potential (Templin, 1957, Chomsky, 1969).

By the time a child is ready for school although able to produce orally the basic patterns of language and has a vocabulary that is estimated as high as 24,000 words (Smith, 1941) by contrast, is usually unable to read or to write even simple sentences.
The suggestion here is that to control the writing system of English receptively and productively requires new skills which are not merely extensions of preschool experience. It has been reported that: “At least three or four years will be required to bring the child’s reading proficiency to the level of speaking ability and understanding ... It will take still longer to write with reasonable competence” (Commission on English, 1965).

The Developmental Task

One of the first recognized needs in the primary-school years is the child’s need to write his name, to identify himself and his personal belongings (NTCE, 1954). As a child matures, needs and desires for writing increase while the skills necessary to fulfillment vary with level of maturity (MacIntosh and Hill, 1953). The child who dictates his message for the teacher to write may add the date, or the greeting, or some decoration, to claim ownership (14) (Burrows, 1952). It has also been reported that young children when questioned on what they are looking forward to most when they go to school, will usually reply, “learning to read and write” (533) (King, 1969). Relatedly, the six-year old has been described as “characteristically eager to learn” (275) (Ilg and Ames, 1965). If human capacities are strengthened by use (Combs, 1967), and if “calling on the child’s own resources preserves and protracts a little longer his own true personality,” (35) (Sylvia Ashton-Warner, 1963), writing then can be considered a developmental task defined as: “a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by society, and difficulty with later tasks,” (Havighurst, 1956). The
developmental task concept, Havighurst suggests, helps educators to keep in mind the motivation of the learner and to place educational objectives appropriate to age.

Although writing in the primary grades appears to be a natural and gradual outgrowth of oral language activities, the program in written expression at this level was limited by the children’s lack of mastery of the mechanics of spelling and handwriting (Greene and Petty, 1967). In considering the child’s oral language competency, desire to write and the observed limitations of both the instructional program and of research at the primary level, the literature in the field is now examined.

Early Research

Three early studies of children’s writing are included for two reasons: (1) to acknowledge the impact of inquiry on continuing research and (2) to introduce the more recent investigations of this period in terms of measures of evaluation and procedures.

Hoppes (1934) analyzed 15,000 sentences written on seven different topics by 368 children in grades three through six. He found that both boys and girls wrote in greater quantity and with longer sentences of simple and complex construction in each grade from fourth to six, inclusive, than did the children in the preceding grade. Hoppes suggested that the young writer “must exhaust momentarily his mental energy in relatively short sentences and in relatively few statements concerning a given subject” (66) and attributed the longer and more complex sentences used by older children to their span of attention.

Bear (1939) gathered approximately 12,000 stories written about an interesting experience during the summer vacation from children in grades one through eight in 24 elementary schools in St. Louis as a basis for the study of children’s growth in the use of written language. It was found that the length of the stories as measured by the number
of sentences increased gradually to the sixth grade where children used an average of approximately ten sentences. Through grades six, seven, and eight, the length of the story remained approximately the same although sentence complexity was found to increase. **Bear** notes that "inasmuch as each child wrote a story on an interesting personal experience, and since the story was written without any restriction as to length or amount of space used, it seems reasonable to infer that stories of the length indicated represent an elemental factor in language growth" (314). **Bear** concluded that "the length of story (should be) one of the standards to be employed." The more recent findings suggest that consolidation of language is a more valid indication of language maturity than length (Hunt, 1965).

**LaBrant**, (1932), examined the written expression of 1,007 individuals comprising three groups: grades 4-9, grades 9-12, and eminent psychologists. The singular significance of the LaBrant study is that the clause was introduced as the unit of study rather than the sentence because "it is impossible to determine what constitutes a sentence in an individual's written or oral composition unless the sentence be perfectly punctuated by marks or inflection" (102). **LaBrant** found that in the group of grades 4 through 9 there was a tendency to use an increasing proportion of subordinate clauses as a mark of increasing language development and she concluded that this tendency is a function both of mental and chronological age suggesting that experience plays an important part in the mastery of language. In the introduction to the study **LaBrant** noted some observations which, more than 30 years later were still relevant considerations: (1) the importance of a study of language development because of the intimate relation between language and the thought processes; (2) the limitations of a quantitative study of personal language through counting the number of different
words used and the frequency of their appearance in the vocabulary. Recognizing the
difficulty of studying language development in purely quantitative aspects of children’s
writing, nevertheless, without at the same time considering the thought processes
involved, LaBrant concerned herself with “how the growing child expresses himself
without attending to ‘why’” (401). It is interesting to note that in oral language too the
“how” and “why” (Piaget, 1922), of language development have been discussed, while
the most mid-century recent research considers both aspects simultaneously in the study
of psycholinguistics (Carroll, 1953).

Variables in the Evaluation of Written Composition

The variables which may affect the writing performance have been described as (1)
the topic, (2) the mode of discourse, and (3) the writing situation (Braddock, 1963). The
instructional program was also considered a variable in the evaluation of children’s
writing performance.

**Topic.** Although earlier studies revealed that young children wrote more about
pets than any other topic and were more interested in writing about other children than
about themselves (Gunderson, 1943; Cooper, 1947), later investigations have revealed
personal attitudes and reactions to provocative stimuli in the written responses.

Miller (1967) studied the writing samples of children in grades one through six
and found that children reveal information about themselves concerning: self
impressions, home and family, friends and social relations, school and citizenship,
interests and experiences, emotions and problems.

Noah (1967) has referred to children’s writing as an expression of the child’s
thoughts and experiences which as noted by Monk (1959) may be related to their home
environment.
Biberstine (1968) analyzed the compositions of 352 fourth-grade children and found that 81.3% of the responses to a stimulus paragraph used to elicit expressions of situations that the children wanted to change, or deficiencies they wanted to remedy revealed problems classified under the areas of school, world, personal, home, or miscellaneous. The findings bear implications for other facets of evaluation.

This supports Kohl’s (1967) suggestion, for example, that a student can improve the effectiveness of his writing only if he can judge its effectiveness through “talking to an audience ... one that takes him and his ideas seriously” (8). According to Wilt (1965) the young child writes for the purpose of “communicating with someone” (152). The Biberstine stimulus provides that purpose.

Not only topic but whether the topic is assigned or self-selected has been found to be a factor in children’s writing. In an early study, Soffell (1929) found that children in the lower grades seem to profit more from being allowed to choose their own subjects than the intermediate grades.

In determining children’s interests prior to self-selection of a topic, Edmund (1958) found that children did not select the topics of expressed personal interest when they were permitted to choose their writing topics. Edmund suggested that either the children had not been taught to do so or they may not have been able to identify their interests.

The relationship of topic to the instructional approach has been investigated by Nelson (1965) who studied two approaches to the teaching of written composition: an assigned topic approach and a self-selected approach. A basic concern of the study was focused on measuring the development of language under these two teaching programs and assessing the language output in terms of volume and quality of writing produced
under each program. An analysis of the children’s written compositions indicated that the quality of written expression improved through time under a self-selected writing program. This finding is consistent with the early empirical work on the development of language and supports the research on the quantitative and qualitative changes in language which occur as the child matures. Nelson suggested that “as the young child explores written symbols for the first time, he is frequently preoccupied with gaining a bare grasp of the essential writing skills. Later, when the child gains some skill in the mechanics of writing he is able to experiment with certain elements of style and variations in content under an instructional program in which divergent pupil behavior is encouraged” (365). It was also found that the self-selected program yielded a greater variety of words than the assigned-topic approach but the difference in vocabulary was not as great as the difference in volume. Nelson suggests that the assigned-topic approach using a variety of topics may have elicited a variety of different words which were unique to each topic while the self-selective approach suggests a writing vocabulary that is unique to the individual pupil’s experience, maturity, and interest. In addition, it was found that productivity under one teaching model tended to be correlated with productivity under the other teaching model, suggesting a probable level of linguistic proficiency for each child. Nelson concluded that early pupil preferences in writing may relate to personality factors which determine the reactions of different children to teaching situations which are high or low in structure or authority. This suggests that studies of programs in writing instruction consider the factor of personality in evaluation.

The effectiveness of the topic in relationship to other variables has been reported by Armstrong (1965) and Schuerger and Frankiewicz (1968).
Armstrong (1965) attempted to develop an objective measure for rating fifth-grade compositions using eight criteria: frequency count of the number of words used, the communication units, the words per communication unit, the value of words according to the Rinsland list, an abstraction score, the number of kernels per communication, the number of different communication units used, and the percentage of linking verb patterns used in the communication unit. Although it was found that fully ten percent of the total variance was due to "undefined elements," differences in the composition were attributed to the subjects upon which they were written.

In a study of "hypothetically independent dimensions" in the rating of compositions with respect to content, form, flavor, mechanics, and wording, it was found that with the exception of mechanics, dimensions of composition skill should be thought of in terms of the kind of topic used as stimulus rather than as skills of composition across topics (Schuerger and Frankiewicz, 1968).

In summary, if a child feels that a "language is his" (ix) (Elvin, 1966), "to express his own ideas" (3) (McKee, n.d.), to "an intelligent listener" (249) (Watts, 1944), it can be expected that he will not "write writing," but will "write about something" (103) (Postman, 1969).

Sandel (1967) recognized the effect of topic in the use of three stimuli situations to elicit the children's oral and written responses. One stimulus serving as the constant stimulus for the three-year-span of the investigation provided for self-selection of the specific topic (a game) within the framework of the question.

**Mode of Discourse.** Johnson (1967) studied the writing of third-grade children with respect to differences in writing narration, description, and explanation. The compositions were motivated through classroom experience and the titles were provided
by the children. The compositions were analyzed for quantitative factors as the number of sentences and the average number of words per sentence written by the individual children in the three forms of composition. It was concluded that children at this level "tend toward consistency in the number of sentences in narrative, descriptive and explanatory writing; little relationship existed in the number of sentences written and sentence length; all forms of sentence structure in the three forms of writing were used with a preponderant use of the simple sentence; narrative compositions were longer than descriptive or explanatory writings on the basis of number of sentences" (269).

It was found that the written language patterns of intermediate grade children differed in descriptive, expository or narrative composition when they listened to unfinished stories and responded in writing (Bortz, 1969). The greater quantity, most complexity and subordination were observed in expository writing. The least complexity and subordination was revealed in the narrative writing. In descriptive writing, the children used the least quantity and the greatest frequency of simple and compound sentence types. A greatest frequency of T Units was noted for fifth grade students than by fourth grade students and subordination increased with grade level.

The findings of these two studies indicating differentiation with grade level in the observed features of the children’s writing correspond to those of Whitehead (1968), Strickland (1969), and Spache (1953).

Whitehead noted that "very few written reports or original stories are to be expected of individual, primary-grade children.” According to Strickland many children are eager to write their own stories beginning in the second grade with varying degrees of independence in writing at the third-grade level. Spach refers to fifth grade for training in the preparation of simple, written reports.
In another interpretation of "mode," Moffett (1968) describes three kinds of writing: "writing down, writing up, and writing out." "Writing out," he explains, "gives full play to the inventions of imagination" (117). Writing down is the "recording of on-going events" (127). Writing up refers to final writing that "takes off from talk or notes and results in something complete for an audience or an overall purpose" (139).

**The Writing Situation.** The role of the teacher and evaluation procedures have been noted as factors in the writing situation. Taylor and Hoedt (1966) concluded from a study of the effect of praise with and without correction on the writing of fourth grade children that children's work will not deteriorate if criticism and correction are withheld in favor of praise. Joos (1964) contends that children are hesitant to write because of fear of error and condemnation for writing faults and claims that a child confines himself to the use of simple sentences in writing "for one reason only: self defense" (210).

Gunderson (1943), Burrows (1952), Lamb (1967), and Strickland (1960) placed emphasis on ideas rather than form at the primary level particularly.

Rowe's (1967) has suggested a pragmatic approach to writing activity, stressing the idea of the "teachable moment" and the rapport between teacher and student as sources of effectiveness (279).

**The Instructional Program.** Greene (1947) determined in a comparison of direct and formal methods that "correct" writing habits can be achieved through extensive writing experience (278).

In a recent counterpart, Miller and Ney (1967), and later Ney (1969) found that conditioning syntactic performance of children at varying grade levels resulted in facility in writing, longer compositions, vocabulary diversity, greater imagination and consistent
improvement in test performance of the structures practiced. Ney concluded that the oral methodology can be started in the primary school since second graders can handle the sentence combining exercises orally with facility. The implication here is that although this type of instruction is suggested, the children's potential writing ability is recognized. Another type of discipline in writing instruction was suggested by Watts (1944) who required children to write all that is of interest or importance to them about a topic in no more and no fewer than three sentences to exercise their judgment and skill for a perfectly definite purpose. He devised a three-sentence written composition scale for judging the maturity of such compositions.

A "manipulative" approach to writing was investigated in an experimental study in written composition (Barnes, 1964) with second-grade children involving the use of 60,000 small word cards and 100 grooved boards for use in assembling sentences. The children in the experimental classes constructed stories on their desks and then slid the completed sentences into their writing boards. It was found in a comparison of the children's written responses to a picture-stimulus that the children in the experimental group wrote longer stories, used a wider variety of words and exhibited greater imagination.

Isaacs (1966) described the "practical policy" (45) with regard to reading and writing within a structured program of an independent school. The children used writing for everything from menus to games to labels, etc., as aids to recording and communicating. Isaacs attributed the children's eagerness to master these tools to the nature of the early activities. This "practical policy" appears to be the experience approach in practice.
Brett (1965) in considering the findings of Hunt (1965) in classroom practice observed that the time for beginning the analysis of structures in children's writing is "not when children begin to use them, which is very early, but rather when they have become able to deal with abstractions and analytical procedures" (668). Related here is the study of Sampson (1964) who evaluated children's skill in written composition at age 10 and correlated the assessment of subordination index, vocabulary rating, and impression rating, with other linguistic measures and with non-verbal intelligence. She concluded that positive correlations were found between ratings for written composition at age 10 and other linguistic variables at the ages of 2 1/2, 5, and 8 years. This suggests that the identified linguistic variables may offer implications for the writing program in the primary grades to develop and reinforce the skills which are fundamental to the Brett recommendation.

Another focus of instruction was studied by Blake and Hammill (1967) who compared the effects of instructional programs of structural linguistics and traditional instruction on the writing ability of fourth and fifth graders and found that the groups receiving instruction in structural linguistics were superior on "matters of vocabulary growth and word choice" (278).

Finally, in evaluating the teaching of writing by means of television, Becker (1961) notes that none of the television research on writing instruction has included such criteria as the ability to evaluate one's own work, motivation to write, or what might be called "writing fright," counterpart of speech fright and "probably at least as important a hindrance to effective communication" (27). This reference to "writing fright" can be related to Joos' (1964) reference to "self-defense" in children's writing.
In summary, it seems that the variety of emphases in instructional programs clearly suggest the concern, the initiative and the searching of the investigators for improved writing performance.

**Evaluation of Writing Maturity**

A major investigation evaluating children’s writing was reported by Hunt (1965) who undertook an intensive analysis of 1,000-word writing samples of children in grades four, eight, and twelve. There were distinctive procedures in the Hunt study. In an implication to writing researchers at the primary level; Hunt notes that “the fourth grade seemed a good place to begin. Before the fourth grade children may jabber away with ease, fluency and exuberance, but most third-graders write only under considerable duress” (2). An eight-year-span through twelfth grade was used to observe any changes. The eighth grade was used to provide a check-point halfway between fourth and twelfth grades. Although the students in each grade wrote on subjects characteristic of their own grade, Hunt suggests that the treatment of any subject is likely to be characteristic of the writer’s mode of thought and expression regardless of the stimulus. The index of measurement of grammatical structures was refined and “the minimal, terminable units” (211) which are minimal as to length and grammatically capable of being terminated with a capital letter and a period was devised. The term “minimal sentences” was avoided because the word “sentence” already had so many different meanings as LaBrant had noted almost 25 years earlier. The new unit was called a “T-unit” and “as a potential index of maturity has the advantage of preserving all the subordination achieved by a student and all of his coordination between words and phrases and subordinate clauses” (21). Hunt concludes that the older student can incorporate and consolidate more grammatical structures into a single
grammatically interrelated unit while the younger student produces a short, separate unit with a narrow span of grammatical concern or attention. Maturity of language, according to Hunt is measured through a broadening span, consolidation of material, a discard of needless words, and a gain in succinctness. The level of maturity is determined by the longer clauses or consolidation of sentences or clauses because of the skill involved in producing them (Hunt, 1966).

Hunt (1965) reported that in the early grades, or more precisely in the fourth grade, the number of subordinate clauses is a factor which does most clearly distinguish the superior IQ from the average IQ while in the later grades the clause length seems to determine the level of maturity. In later studies, however, factors other than intelligence appeared to have a significant effect on independent writing when qualitative measures were used in evaluation.

Sharples (1968) elicited four compositions from each of 77 ten-year-old students for the purpose of classifying individual originality. Although the results indicated significant differences in the content of the responses to each of four stimuli, it was found that school achievement did not seem to be related to the content of the creative writing samples.

Schonell (1949) found that factors of emotional life, level of social interaction with both children and adults and experiential background played a larger role than intelligence in determining the writing ability of English children.

It was also concluded in a study of grading compositions that there is no positive correlation between a child's IQ and the quality of his writing (The Education Council, 1968).
The interrelationship between quantitative and qualitative measures can be seen in the study of Witty and Martin (1957) who analyzed the compositions of children in grades one through six written in response to a film. Writings of over 2,000 pupils were judged according to the degree to which they revealed (a) an expression of genuine feeling, (b) sensitivity to the value of particular words, phrases, and larger units in expressing feelings, (c) response to the filmmakers intent and to the materials and symbols presented, and (d) correct and appropriate use of English. Compositions were separated according to the grade levels of the children to determine characteristic differences in the writing from grades one to six. First- and second-grade pupils responded in an egocentric manner and tended to write in a simple objective way labelling objects they had seen or feelings they had experienced. Occasionally simple questions were frequently unanswered. Third-grade children wrote longer compositions with greater objectivity, more frequent descriptions of their own reactions, answered many of their own questions, and used more spontaneous language expression. The fourth-grade children appeared a little more concerned about the fact that their stories would be read. Superiority in the writing skill of fifth- and sixth-grade pupils was observed through their use of symbolism, expressed interpretation, originality, and humor.

The concern of the fourth-grade children may suggest the awareness of evaluation or developing self-consciousness. Bettelheim (1969) described the situation in which the children in the kibbutz in Israel wrote eagerly but he notes “they would never read out what they wrote in front of the class, nor would they show it to the other youngsters” (261).
The following study of vocabulary determined the frequency of appearance of words but did not indicate the meanings represented which it is acknowledged (LaBrant, 1932; McCarthy 1954) is a more accurate measurement.

A survey was conducted to determine those words which children in grades 1-6 use most frequently in written expression and to compare results with the findings of the Rinsland study of 1939 (Kinsey, 1966). Based upon writing samples of 1,100 elementary school children, comparisons showed the 1939 sample used to the first 200 words significantly more than did the sample in 1964-65, in every grade except the third grade, which was found to be identical. The findings suggest that there are some basic words which continue to carry a heavy load in written expression year after year. The investigator concludes that "the core of 345 words used at every grade level and the 2,455 words used with a total frequency of 3 or more, may serve as a current basic list to be learned early so that children may be freed to independently pursue vocabulary development and enrichment" (3776). These findings support expressed expectations of children’s writing ability based on their oral vocabulary.

Quantity of writing was investigated in the analysis by grade to determine the length of the composition specimens written by 14,400 intermediate-grade children in four geographic regions of the United States. Hill and Hill (1966) found that there was a steady increase in the number of words used from grades four through six but that geographic region was not a significant factor.

A procedure bearing a resemblance to the Barnes’ (1964) instructional program was used as an evaluation device, eliminating any practice effect, calling upon the child’s ability to construct words from letters as opposed to constructing sentences from words in the Barnes program.
Stevenson, et al., (1968) studied developmental changes in children's language performance on an anagram test. It was found that as the grade level increased from 3 through 9, subjects produced a lower proportion of words whose letters appeared in the same order as in the stimulus word “generation” but a higher proportion of words whose letters appear in a different order. This suggests further investigation into the frequency of letter combinations represented. It was concluded that “anagrams is an efficient and productive means of investigating developmental changes in children's verbal processes” (912).

It appears then that the relationship between length of response expressed in quantitative measures and the consolidation of language revealed by the Hunt index of linguistic maturity suggests that both types of measures could be used concurrently to determine the effect of consolidation on the continuum of language development, particularly at the points of greatest change in level of writing ability. Hunt's significant procedures and findings also suggest the need for continuing research particularly at the primary level.

In the Sandel (1967) study, the quantitative measures of number of though units, corresponding to Hunt's “T unit” and Loban's “communication unit” described earlier, together with the number of running words to determine length of response which Hunt suggests as an index of early writing performance appear to be criteria which are applicable to the writing of children in the primary grades.
Endnote to Research Summary #2

The series of summaries of historical research includes #1, Characteristics and Development of Oral Language; #2, Characteristics and Development of Written Language Ability, and anticipated, #3, Comparison of Oral and Written Language; #4, The Effect of Orthography in Written Communication, and #5 the Effect of Environmental Factors in Oral and Written Language Development.
References


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HISTORICA RESEARCH SUMMARY #2 (1900–1970) THE CHARACTERISTICS AND DEVELOPMENT OF WRITTEN LANGUAGE

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Hofstra University

April 1998

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