

A PSYCHOLINGUISTIC STUDY OF LITERACY
IN A PRIMARY GRADE

by

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B.A., University of British Columbia, 1970

A THESIS SUBMITTED IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Department

of

Education

ACCEPTED
FACULTY OF GRADUATE STUDIES

DATE

6 NOV 78

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April 1978

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ABSTRACT

The problems of teaching for literacy have been studied in this thesis from two related aspects, nature - how written language evidences the same learning principles that influence the child when he learns to speak, and nurture - how these principles can help the child become proficient in the new form of expression. Therefore, the nature and the nurturing of literacy has been examined and a psycholinguistic theory of the acquisition of literacy has been developed based on a Piagetian view of thought and language in the young child.

The psycholinguistic view of language acquisition is based on the premise that children have the ability to process information about language and become fluent and skillful if the sample of language available is large enough to permit recognition of patterns and development of adequate generalizations.

Children in this society acquire two forms of language, oral and written; both speaking and writing are learned as communicative functions and can have the same personal and conceptual meaning but to develop literacy skills it is essential that the writer process different information about his language.

Oral language development moves from fluency to control and, since literacy builds and extends language skill, personally expressive and fluent writing is also the result of much experience and experimentation in the new medium. Thus, a large corpus of written language is used to make accessible those aspects of language needed to become literate. The problem, of course, in instructing for literacy is to help the child gain both fluency and control. This study presumes that he will master the new forms sooner if he learns to process written language for meaning and so build the necessary strategies for recognition and production (Smith, 1975); the acquisition of literacy thus begins with the opportunity for making sense using new forms of language. The study uses the assistance of a scribe so that subjects can make sense in the new medium. The corpus of language is then analyzed for quantity, complexity and type to see if these increase with aid.

Acquisition of literacy depends on language experiences in the new medium of written language; this study uses an approach which stresses the importance of writing as communication and provides experiences to facilitate the inductive learning of the principles which connect speech to script. In this it resembles psycholinguistic learning process of spoken language. This language-experience approach to instruction is justified by Piagetian

principles because there are parallels between written and oral communication. The problem, therefore, addressed in this study on instruction for literacy is to find a way to help the child make the transition to written expression and be able to communicate in the new medium.

The child does not acquire an entirely new language when he learns to write, he learns to transfer his thought or his language learning to another medium. He has to be able to start off knowing roughly what he wants to say and end by being able to write it. This study has been designed to examine third grade children's written language to define the problem of transduction of the oral code to the written code, using the Piagetian idea of egocentric and socialized language. The socialization of thought and language occurs when the child is able to take a less egocentric point of view. This transition has been observed in the writing of the subjects in this study and an attempt has been made to quantify the amount of Socialized Language so that growth can be tabulated and the development of literacy observed.

The result of this study showed there was a high incidence of egocentric forms in the writing of children studied and this was quantified and graphed during the research. As the study progressed the percentage of egocentric language decreased. Fluency and control using the written medium increased as measured by the instruments used in the study as the subjects were given assistance of a scribe to help record their ideas and so they could observe the process

of composition. This was considered a synthetic method of teaching literacy since any analysis of spelling, grammar, punctuation was incidental to recording the child's own message. However, the subjects evidenced in this independent writing some improvement in the mechanics of writing. The study was considered a pilot study for further research and therefore the length of the study is not sufficient to make definitive statements about success of teaching literacy by this method. I am grateful for the opportunity to use this type of research, which included a theoretical and subjective element to the directors of my thesis.

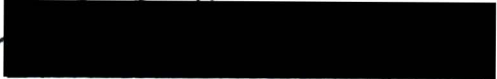


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Dr. Barbara McIntyre

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ACKNOWLEDGEMENTS

This thesis is the result of much personal questioning about the characteristics of literacy. I have been given much direction and support by my teachers during my study on the masters programme and would like to thank Dr. Peter Evans, my supervisor, for his insight and inspiration and Dr. Robert Armstrong for the clarity of his questions and advice in helping me find the appropriate means to study the problem. Dr. McIntyre has been most valuable to me as a friend and has advised in ways to apply my understanding to help children. Many others have contributed to the formulation of my ideas. I would like to mention Miss Judy Barnard, who acted as my research assistant.

I would not have been able to conduct the study without the interest and understanding of Mrs. Beverly Ralphs, the grade three teacher at Fairburn Elementary. She and her class were willing participants in the study. I am grateful that Mr. Ken McCulloch, principal of Fairburn permitted me use of the school facilities and supported me in the research.

Above all, I acknowledge the contribution of my family whose confidence in my ideas and concern for me made it possible for me to complete the project successfully.

CHAPTER ONE

A PSYCHOLINGUISTIC STUDY OF LITERACY IN A PRIMARY GRADE

Speech is civilization itself.

Horace Mann

Every child learning to talk repeats the process of civilization and evolves as a social being as he realizes the potential for group interaction and communication. Speech itself is learned through social co-operation; as the child learns to express himself using language, there are profound social effects which cannot fully be reproduced by any other activity. Speech, in this society, however, is sometimes replaced by a written form of communication; a form which children do not learn naturally as they do speech. This study is concerned with how children can be taught to write as a means of communication.

I. Statement of Purpose

The study consists of a careful examination of the writing, both process and product, of a small group of children with particular attention to:

- 1) the quantity of written language they produce;
- 2) the syntactic complexity of the written product; and,
- 3) the percentages of egocentric and socialized language in the written product.

The purpose of this study on the development of literacy as a means of communication is to analyze, through a case study approach, some of the problems a child encounters in transferring oral language to written symbols. The thesis will:

- 1) Examine some causes of the difference in fluency and control between oral and written language.
- 2) Explain some reasons for the hypothesized regression to less complex, coherent language in early writing.
- 3) Explore some means for more natural acquisition of the linguistic knowledge necessary for written fluency.

The purpose of the case studies is to develop a corpus of written language and analyze it for quantity, quality and type by:

- 1) the use of a scribe to increase the corpus of written language;
- 2) the assistance of the scribe to increase children's independent written production;

The method used will be:

- 1) the observation of children's written production to determine if the scribing method increases fluency of expression and control of linguistic conventions;
- 2) the analysis of written production using procedures based on psycholinguistic theories to determine if instructional strategies for written language acquisition could be recommended.

Information will be presented in the case studies which will be used to analyze some problems in the development of literacy in children.

II. Statement of Problem

How language and logic are related to literacy has been a major linguistic puzzle. A child learns language through active participation in the communication process and masters the forms he needs to convey meaning very early, but to acquire literacy he must also learn the forms and transfer meaning to the symbols of written language. To use the medium of script fluently, coherently and expressively the child must again engage in active participation in the communication process. Although both speech and writing are based on thought processes and are language production systems to communicate meaning, the transition to written communication often results in a regression to less fluent expression. Therefore, a detailed study of children's problems in learning to communicate in writing may explain the later development of literacy.

Language, logic, and literacy are related by the child in some system of generalizations derived from comparison of the

forms of script and speech. How can he learn through experience with written communication to become as fluent in the new medium of script as he is in oral language? The problem in this thesis is to find how children connect the written code to their spoken language so that the relationship between oral fluency and literacy may be better understood. (To study this problem the following questions have been addressed:)

- 1) Is fluency and control of written language similar to fluency and control of oral communication?
- 2) Is fluency of written language related to control of message production for purposes of communication?
- 3) Is written fluency dependent on the creation and organization of ideas to communicate?
- 4) Is the regression in fluency and control of language in the early stages of writing due to difficulties inherent in the written medium?
- 5) Do children learn the complex linguistic information needed to write with fluency and control through a method which synthesizes form and content?

III. Theoretical Framework

It is postulated that learning to write is equated to learning to convey meaning in a new symbol form and that, if a child adapts thought and language to written form it is related to his need and desire to communicate. The ease with which he can then master the linguistic information necessary for fluency depends on the opportunity for directed practice and appropriate instruction. Some understanding of the nature of language must support the attempt to make children literate by instruction. Since language has been studied from many points of view, the definition of the basic components and processes depends on the base and bias of the study. Three statements about language are fundamental to this study of how children learn to write:

Language is communication;

Language is personal expression;

Language is rule governed.

A. Assumptions

The above statements are derived from certain assumptions about written language learning which guide the research for this study.

- 1) If language is used for communication, acquisition or written language is facilitated when it is a natural development of communication skills.
- 2) If language is used for personal expression, written expression is hindered by the child's tendency to use language spontaneously according to subjective needs and to disregard coherence and precision in communication.
- 3) If language is a rule-governed behaviour, learning to write is a complex psycholinguistic process. The child learns the necessary linguistic generalizations and symbolic representation through use and synthesis of knowledge.

B. Issues

The above assumptions will be examined to establish a connection with current educational issues pertinent to language learning. In examining the writing of children during the study, the focus will be on three issues:

- 1) The implications of psycholinguistic theories of language acquisition for mastery of written communication.
- 2) The implication of Piagetian concepts of egocentric and socialized language for the development of fluency in written expression.

- 3) The implications of a language-experience approach using synthesis of language learning for the acquisition of written skills.

IV. (A) Brief Plan Of The Report

A review of the literature related to this study is presented in Chapter Two. The chapter deals with four main strands of educational research:

- 1) psycholinguistic support for a programme of literacy in the early grades;
- 2) Piagetian-based analysis of literacy;
- 3) current methods for teaching children to write; and,
- 4) present measures used to improve writing skills.

Chapter Three outlines the plan for collecting information from a group of children learning to write. The design of the research is presented with justification of the instruments.

Chapter Four presents the findings of the research utilizing graphs and tables resulting from the study.

Chapter Five summarizes the ideas basic to the study and presents some conclusions and generalizations. The implications of the research for developing a programme to teach literacy are also included in the chapter.

Three appendices are included. One contains an outline of all writing assignments done with the subjects. A chart of daily motivation, presentation and product for the eight week period is presented along with daily anecdotal comments on children's

performance. The second appendix shows samples of the written assignments of all subjects for a one week period including instruments used to collect the raw data for the tabulation in Chapter Four. The third appendix is a sample of the tape scripts taken to establish the percentage of egocentrism in subject's speech.

CHAPTER TWO

A REVIEW OF THE LITERATURE

The Written Language Of Children

This chapter will present the educational research on some aspects of children's written language with the view of supporting the psycholinguistic approach of this study. It emphasizes the language-learning nature of the child and suggests a way to nurture it. Nurture implies using a knowledge of nature to assist optimum or maximum development; to help children make the most or best use of their language knowledge in learning to write, the teacher requires an understanding of both children and language.

What must be known before children's writing can be nurtured? Generally, it is important through research to learn enough about children's language to recognize why language is related to experience and intellectual growth, what language can be expected at different stages and how children's written language can be elicited and refined.

Specifically, enough must be known about the individual child to determine his language patterns, his experience, his interests, his problems and his stage of development. The teacher is then able to nurture written language by helping children realize the purpose and discover the sources for writing; purpose is whatever justifies the activity of writing both for the teacher and the child, and the sources are whatever provides the impetus to expression. How can writing be made a purposeful act and the child helped to write well?

The philosopher, Heidegger, has said, "One learns to use the hammer best when one uses it to hammer"; this is also true for writing, it is learned best as a purposeful act with a sense of direction and a source of power. If the philosophy underlying instruction stresses that experience in writing must connect the purposes of expression and communication with understanding of the rules that underly language, children will learn to use the tool naturally and well. It is valid, educationally, to single out an instructional purpose for writing if it is metaphorically "to hit the nail on the head", and help children to connect their sources of language to the purpose for successful written expression, but perhaps the skills of writing are also learned best when they are related to the reasons for writing. This requires an understanding of the purposes for which children can use writing and an awareness of the sources of power which will help them direct their purposes in writing.

A. Sources For Written Expression

The inner reservoir of experience and thought is the source of all written expression - from it must be drawn all the elements for an imaginative story, all the observations and impressions for

descriptive writing, all the details and facts for expository writing, and all the forms of language available to convey ideas. The input to this reservoir is the experience in living the child has had, the stimuli from his environment, the stimulation of language and the stimulus of the imagination which makes ideas his own. Kubie analyzes how the source is fed:

We now look on the brain not as a device to do work but as a communications machine to transmit information. At the core of this process is a continuous stream of "subliminal, i.e. preconscious," activity This preconscious processing of data proceeds at an extraordinarily rapid rate and with great freedom, as it assembles and disassembles many diverse patterns.¹

Can children find this source in themselves? The source of thought is obscure to most people - it is especially difficult for anyone trying to write to consciously direct thought. The direction of thought cannot occur, according to Piaget, until the child has progressed intellectually out of an autistic stage, and has begun to socialize what had been an egocentric point of view. This development will be discussed at length in Section Three:

Informing Process - Giving Form To Thought.

The way material is drawn from the source by "preconscious processing" of data from the internal reservoir of information is also analyzed by Kubie,

. . . symbolic processes sample the entire stream of preconscious activity, i.e. the input, the internal processing and the output This conscious sampling of preconscious input, preconscious central processing and preconscious output is mis-called "thinking" . . . - the process of conscious

symbolic sampling has an important function in mentation but it is not thinking.²

Bruner describes the development of symbolic processes also and stresses that input from other systems is important in the development of cognition; the sources from which concepts enter the cognitive structure of the child he sees as action, image and language, which he terms the enactive, the iconic and the symbolic modes of cognitive activity.³ He believes that language use is the most abstract, or symbolic and conscious sampling of conceptual activity, and that written language is what he calls a "second level abstraction", therefore, the sources are also important for written expression because they form images and reactions, based on interactions with the social and physical world, which give the child something to say.

Children's written language can only be an externalization of the ideas they can generate. Action, experience and language serve as sources to develop or expand the generation of ideas and images which can order the system of thought necessary for communication. This is what Burrows discusses when she says that to write before taking part in varied and rewarding experiences or to communicate about them before ingesting them into the "self" cannot nurture independence and self confidence in the young writer.⁴ If he has something to say, the child will project some aspect of his personality, experience, or intellect in communicable form. He can only write from his view of the world. This is the

sphere of self that contains all the possibilities for thought and experience that are the sources of the child's expression.

The source of any message is within the child himself.

The pioneer work on "self as a source" was done by Hughes Mearns.⁵ Burrows in her report on research in the last decades, attributes interest in research on children's writing to his early concern for the importance of their expression for personal development. This has been re-emphasized recently in scientific research concerned with communication and production of messages. The child's source of messages includes both cognitive and affective elements because his message expresses both individual thoughts and reactions. There is common agreement between Applegate⁶, Bear and Meta⁷, Burrows⁸, MacIntosh⁹ that composition is a thinking process which cannot exclude the personality and experience of the young writer.

The role of the teacher in providing sources for the child's writing, according to these authors, is to create an atmosphere in which expression is valued, writing is stimulated and children are encouraged to use their own experience and ideas as the source.

B. Purposes For Writing

The purposes and uses of written language are not always clear enough to children to justify the expenditure of energy it takes to put their ideas onto paper; they need to experience success

in the social uses of script and write for purposes they can understand.¹⁰ Purpose does prompt effort. The child will put aside his efficient oral tradition for the demands of the print medium only if he wants to; written form will frustrate him unless it serves his own purposes and he gains personal satisfaction from it. Research by Howell¹¹ shows that: "personal involvement" produces longer units, more different words and longer compositions and the children's attempts to put their experiences in writing are effective if the experience is real and the writing purposeful. To be purposeful, writing should also be an experience in coherent thinking; because students write best when they have something they deem valuable to say and discover the best way to say it.

If writing is a communication act which stems from the writer's need to say something, one of the best ways to nurture children's writing is to use the same purpose that motivates all writers - the opportunity or desire to say something they want to say in their own way.¹² This is supported by Smith, Goodman, and Meredith¹³, who offer numerous suggestions to give personal purposes to written language. They say goals must be related to the integrated purposes of the writing programme - the best results are achieved when children realize the purposes for their writing and share in setting goals for expression, communication and instruction.¹⁴ The purposes of language for the child as for any writer, are to order thought, to express ideas, and to communicate - there exists for writing, as there does in speech,

a dynamic interaction between these purposes and the sources of expression.

The Alice Syndrome

Nowhere has the writer's problem been so wittily revealed as by words Lewis Carroll has Alice say, "How do I know what I think 'till I see what I say?" For a writer, the connection of thought and word is a literal truth and the process of composition must help him make conscious the source of his ideas so he can see what he really has to say. Lewis Carroll's own "wonderland" is a sophisticated example of the process of making thought visible. The effect of seeing what one thinks through writing is to make conscious, observable and functional the process of language, thus there is a dynamic interaction between thinking, seeing and saying in creating any expression in written form. There is often an element of surprise when children discover that the things they write are actually their own thoughts; in fact, one of the initial problems is getting them to realize that they already have in themselves the thought, the source, the imagination, the information so that the task of writing is to put these on paper. The Alice Syndrome is common to all writers who gain access to thought by seeing what they say, that is, by finding the source of ideas in themselves through written language.

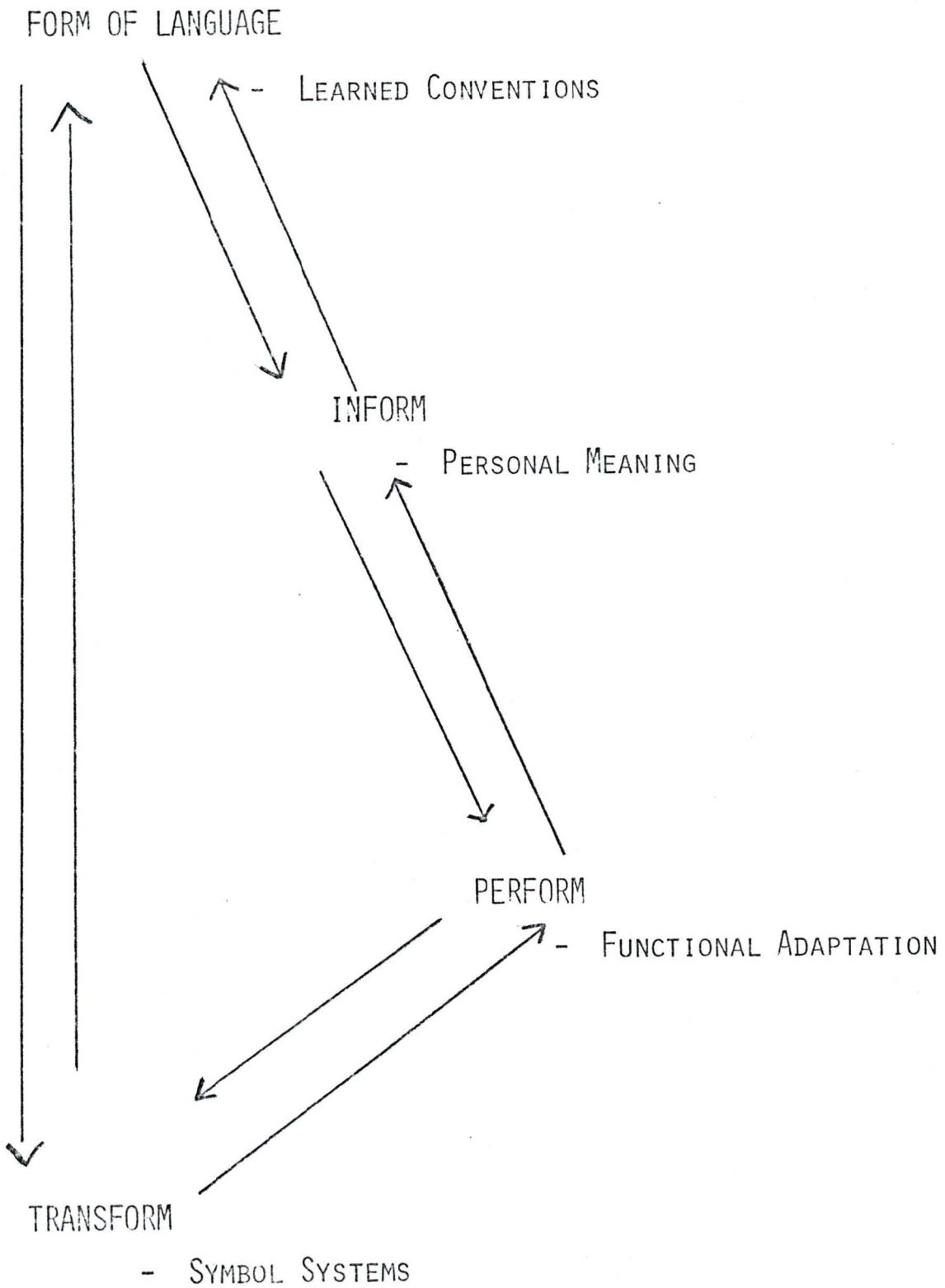
The characteristics of the syndrome are that the writer must use language forms for thought, fill the forms with his own

information or content to perform the expressive act of writing.

There is a synthetic process in language learning connecting form and information in performance which not only creates, but transforms thought. These aspects are diagrammed in Figure I; they will be discussed under separate headings:

- I FORM : learning and refining written form;
- II INFORMING : giving form to thought;
- III PERFORMING : putting information in communicable form;
- IV TRANSFORMING : developing performance skills

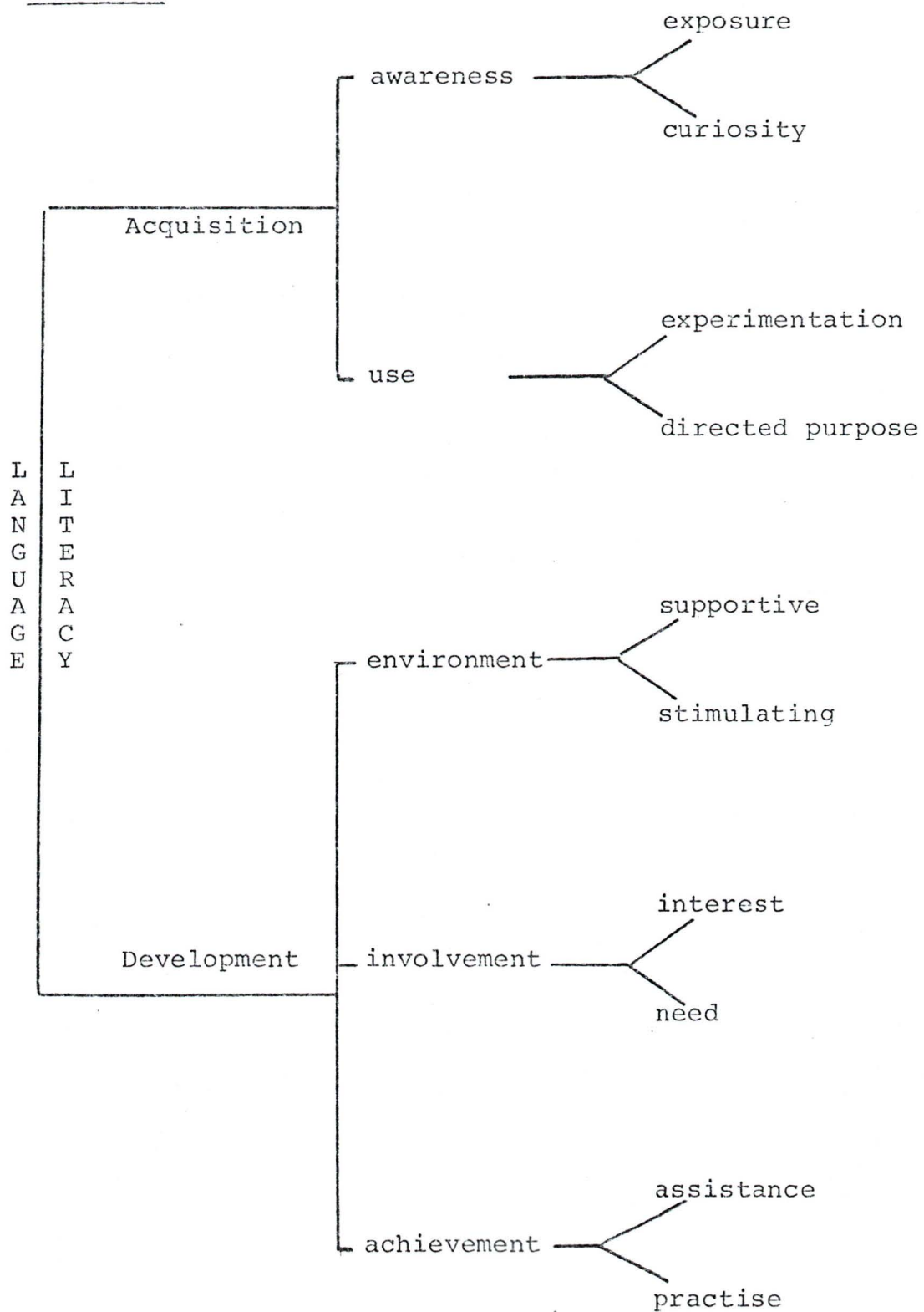
FIGURE I



I. FORM - Learning And Refining Written Form

Learning form cannot be considered the initial task of learning to write but unless children have a visual representation for their speech/thought, written expression is impossible. The child himself, sees the initial task as learning forms - he knows he cannot write until he has learned his letters. But the letters, as they are learned, are connected into words which take on forms of meaning and are combined in the more abstract forms of sentence structures related to the form of the total composition. Forms, therefore, are continually being learned and refined by use, then altered with new ideas as the concept and awareness of language develops. Thus, the paradox of form and idea is as true for early writers as it was in Plato's philosophy. Which is the true or basic reality? Cazden states, "Writing, in other words, may thus contribute to the metalinguistic awareness of language and to the uses of language in interpersonal thought."¹⁵ Forms make ideas communicable; ideas make forms comprehensible; the acquisition of literacy depends on learning forms through awareness and use. The development process divides into three factors, the environment, the child's involvement, and his achievement. Research is needed on how the environment can support and stimulate written performance, how the child's interest in and need of written language grows out of involvement in communication, and how assistance and practise of the skill can increase his achievement of performance skills.

FIGURE 2



Children's performance in writing has to be based, as does speech, on some initial competence which exceeds their efforts to communicate on paper. Figure 2 diagrams the parallel nature of language and the nature of literacy, as in two phases; acquisition and development. The acquisition branches will be discussed in this section.

A. Awareness Of Written Form

(i) Montessori's Miracle. Most children come to school with some idea of how symbols or forms of letters have language meaning because they have been exposed to packages, commercials, signs and print media. Therefore, as Cazden says, "a detailed contextual form of written speech must build on his preliminary exposure."¹⁶ The symbols will be identified with meaning as the child systematizes information he has gained from the environment. Montessori, working with Italian children who need not puzzle over the correspondence of symbol and sound, is the most sentimental advocate of the natural process of acquiring literacy. In Discovery of the Child, she illustrates her belief of the explosion into writing, by the example of the child who took the chalk, bent down and wrote "mano" on the terrace and thus understood the mechanics of writing. She says: ". . . therefore, written language is not developed gradually but in a sudden outburst, the child is able to write every word."¹⁷ However, literacy, English at least, is somewhat more complex, but awareness is

gained by the principles Montessori used - exposure, curiosity and readiness.

(ii) Exposure. To suggest that exposure to symbols is the first step in developing awareness for literacy is not to dismiss the necessity of helpful instruction to focus the attention of the child, but to emphasize that the child must process his own learning of symbols and has the requisite ability to do so. A variety of forms must be learned before he can become a proficient writer and the learning principles involved in mastery of the forms are similar to those for speech.

(a) Letter and Word Forms

Several research studies have been concerned with how children learn written words. Rozin, Bresman and Taft¹⁸ tested children in kindergarten for their understanding of the fundamental relationship between writing and speech and found that there was some correlation between social economic status (S.E.S.) and perception of written forms. McNinch¹⁹ tested kindergartener's ability to discriminate word boundaries as readiness factor for writing tasks and found it to have no lasting effect on success in perceiving and using written form. Downing's study pointed out that children do not understand the concept of a word as a form in oral speech and must learn the distinction before they can read or write.²⁰ Rystrom²¹ was concerned with

children's retention of individual forms of letters, after they were taught to write the symbols. It can be concluded that in first grade children, there is not yet a strong conception of how sounds are tracked by letters. Smith theorized that children learn both letters and words by a process of discrimination of features; which is accomplished by neurologically coding, rather than conscious analysis.²²

(b) Composite Forms

The word composition is very apt for the process of putting forms together in a relationship that has significance for the composer. The composer chooses his forms on the basis of knowledge and purpose to produce a message that can exist separately from himself and have meaning for others. It requires a deliberate use of symbols and an understanding that the whole has more significance than any sum of the parts. Miller and Ney²³ designed systematic oral language exercises calculated to transfer facility in using complex forms to the writing of fourth graders, and reported that the subjects were freer, used more of the forms and more complex forms than did subjects in the control group. As children are instructed in combining forms, either directly or indirectly, (as by dictation techniques which will be discussed in Section IV: Performance), they are stimulated to make their messages more complex.

An interesting experiment which prefigures the "Break-through to Literacy" programme, was done by Barnes²⁴, who prepared small word cards for the children to use to fit onto boards to compose stories. The subjects, who did not have to produce the separate forms, attended to the "composition" and wrote longer stories, used a greater variety of words and showed more imaginative plots and story details. Another study, by Karnes²⁵ on the use of the typewriter with its standard letter forms in composition, demonstrated that the test group showed significant gains in complex sentence structure as well as in spelling proficiency. Because the child wrote more, and wrote more easily, he was able to formulate the generalizations about language that made him able to manipulate the content of the message. Kellog-Hunt found in his study of writing at three grade levels that children produced longer thought units and more complex sentences as they progressed in age and concluded that the psychological maturation played an important part in the ability to handle complex forms.²⁶

(c) Standard Form

The learning of the forms of the language called "Standard English" is considered by many researchers to relate more directly to written language than to speech. Children's writing is exposed to more criticism for irregular forms than their speech. So, as Cazden reports: "It is intended

that these standard forms will be primarily associated in the child's mind with written English"²⁷ and that if this is true the forms and style of written language can be best learned by much exposure to it, often in the early grades by use of literature as a model. She cites Bernstein, who has done work with an 'elaborated code' and a 'restricted code', as stating that practise in written composition may be the best way to learn the 'elaborated code', even if children don't use it in speech, because they need not process forms as rapidly as in the face-to-face requirements of speech. DeStefano studied this and found there were significant differences between the two media partly because of the more deliberate nature of writing which decreases the number of non-standard forms.²⁸ If exposure is one efficient method of learning forms, in the early grades the extensive use of literature helps the child discover the forms and style of written language.

(iii) Curiosity About Written Form. Much of the "soft research" in language experience approach to early reading is based on the assumption that children, like Alice, get 'curioser and curioser' when exposed to print writing. A curriculum for teaching composition, of course, builds on the child's curiosity but it must help him understand and interpret the written symbols. Nora Goddard's book, Literacy-Language Experience Approaches²⁹

discusses the basic motivation of the child to understand and the necessity of using this motivation to help him relate writing and speech at an early stage of instruction.

B. Use Of Written Form

(i) Experimentation Or Generalization. One of the theoretically important works in this decade has been Teaching The Universe Of Discourse by James Moffatt, who states that the only subject in the school is language, "As content (subjects) are what one discourses about, as process they are acts of discourse."³⁰ Other recent studies have been influenced by his integrative view of language. Moffatt generalizes that language should be taught as content, that is, in context of meaning. Language learning, as it is first acquired, is central to his curriculum because he believes that meaning and form are acquired simultaneously and by individual effort. They may be taught systematically but they can only be systematized by the learner. This, and much productive research is due, in turn, to Chomsky's analysis of language in the terms of transformational grammar and the development of a psycholinguistic acquisition theory that is based on the natural connection of syntax and semantics.³¹ As research collects, mainly in the last five years, more of it has to do with how children progress to the "second level abstraction" as Bruner called the writing system. The conclusions drawn from this research will help clarify how children learn to use written language and provide an answer to the

questions about the use of written language. Do children change their language with their purposes for using language? If this is so, as it is in speech, as Moffatt suggests, use of written language has an evolutionary quality - that is, forms change to suit the context, the environment and the child's meaning. He also suggests that it alters in two dimensions - the conceptual and the communicative. The child moves from participating in language as an act, to experiencing it as a spectator, to generalizing about it as a user, and finally to using language to talk about language as a student of language.³²

The fact that every child in every S.E.S., and every intellectual range and every personality type, is a student of his language who makes the linguistic rules that govern his expression through use of the language, appears now as a revolutionary concept, it requires innovations in the method and concept of teaching literacy. Goodman's appropriate definition, "Reading is a psycholinguistic guessing game",³³ has been accepted as an axiom by many reading instructors in developing their programmes as a holistic approach to print/reading. It has been postulated by Frank Smith that by not integrating content and context we have seriously handicapped the natural language learning children should be able to do. They should be allowed to use the same strategies they have developed for generalizing about speech to learn to read and write since the production and comprehension of the written words must be related in some way,

at the level of cognition, to speech.³⁴ Smith has been a pioneer in explaining the literacy phenomenon from a theoretical stance and much of what he says about literacy will eventually find support in studies about written language; he has said "there is much waiting to be understood."

Understanding literacy does demand a holistic approach to writing/reading processes. Forrester has recently conducted a study using psycholinguistic principles which integrated all the language arts including writing skills. It was concluded in their study that children were responding to, interpreting, using and creating print language when form and process were connected naturally.³⁵

(ii) Purposes For Use Of Written Form. In Moffatt's phrase, "teaching the universe of discourse", writing purposes should be connected to experience in thinking about something that matters, interests or stimulates the child, because students write best when they have something they deem valuable to say, writing programmes which provide the purposes and sources of ideas will be "teaching the universe of discourse" and literacy, which is control of the forms, will be both the objective and the result.

Studies on how written form serves the child's purposes are needed to show the best developmental directions of a writing programme.

Language: B.C. has begun the kind of study that will provide the impetus to research in the whole area of purposes of instruction in the language arts. The first step has been to make an accurate assessment of the purposes and practises used by classroom teachers, and on this base may come other research connecting purposes, practises and performance. At present the data includes a survey of:

- 1) The kind and extent of learning experiences in written language, spelling, and handwriting.
- 2) The nature and organization of teaching procedures for the development of attitudes and skills.
- 3) The frequency and duration of learning activities in written language, handwriting and spelling.
- 4) The observed learning outcomes of the programme adopted.
- 5) The procedures and activities in the mastery and application of knowledge of skills in written language.
- 6) The manner of evaluation of attitudes, knowledge, and skills.
- 7) The ways success could be improved.
- 8) The emphasis on goals and content for future programmes.

This survey may reveal how writing is now taught and will indicate need for directing the purposes for writing. At present teachers do provide purposes for composition but they are not always in keeping with what children perceive as valuable or valid purposes for using writing form and therefore they are not successful as methods to nurture their ability to write.

One reason that the written form of language has not been sufficiently adapted to children's purposes has been that teachers have needed an understanding of the child's thought and language processes. How children acquire and use language is related to how they learn to think. This has been defined as psycholinguistic process of language acquisition. But how do children think? Piaget's theory of intellectual development of directed thought for oral expression will be explored with the view to coordinating the child's purposes and type of language with the expectations on him in a literacy programme.

II. THE INFORMING PROCESS - Giving Form To Thought

A. Piagetian Concepts

Language interprets experience, generates ideas and is used to organize concepts verbally; it also serves to connect the individual to his physical and social environment by accompanying action and extending the possibilities for interaction with the world. A conceptual model for language process representing these connections is shown in Figure 2 which is based on Piaget's theories expressed in Language and Thought of the Child³⁶; it illustrates how language functions in the subjective sphere for egocentric purpose and in the objective sphere to fill a social need.

The egocentric and social forms of language are both important throughout life, but Piaget premises that the child is egocentric in thought because he does not differentiate between self and world and therefore is conceptually bound by his own point of view which is reflected in his language. Language becomes increasingly important in Piaget's theory of the stages of intellectual development as an abstract symbol system for ordering experience. As the child develops abstract thought processes or formal operations he increases the range of purposes; social or egocentric, to which he puts language. Language as projection from the E.G.O. sphere demonstrates that the child learns to express a particular set of experiences by generating a particular set of ideas to

symbolize the world and organize an individual conceptual framework which can be communicated to others. Thus, his problem is to learn to use socialized language which gives form to thought.

The problem of the child who is learning to write what he thinks is also one of socializing or adapting his language. He is just beginning to use a higher proportion of socialized language orally at the very time when he is expected to learn to write and Piaget states that regression to egocentric language is common whenever there is confusion of thought or when the purpose of communication is not paramount.³⁷ Communicating depends on the child's ability to make coherent statements; this presupposes that a child can direct his thought. The ability to analyze thought for order and objectification with the purpose of conceptualization and communication is an important development in the socialization of language use. If there is no perceived need to communicate, there is no concern with adjusting the point of view or socializing language.

Certainly in written language, the child is trying to socialize his thought by communicating it but may use egocentric thought and egocentric language because he cannot organize his concepts and generate ideas and express them coherently. Piaget says that interaction with an adult reduces egocentric utterances because the adult can question and direct the conversation for coherence³⁸; that is, he helps connect the two spheres through language. In writing, the child has little

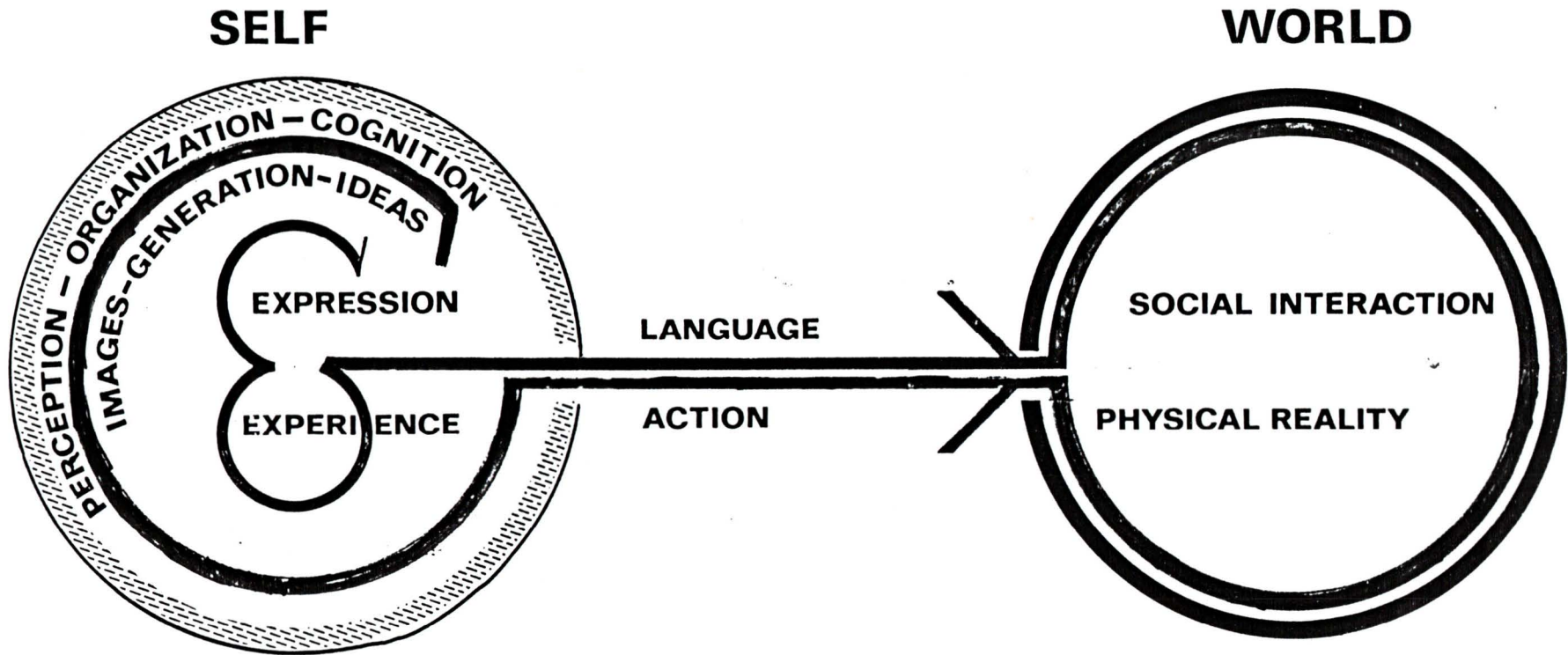


Figure 3.

LANGUAGE-an ego projection

recourse to interaction and he may regress to a high incidence of egocentric language and use ambiguous structures.

B. Concepts And Forms

All language is potentially ambiguous. This, however, is a virtue and not a liability because the units are open to combinations that depend on the purposes of the language user; the child draws from the sources of language what is appropriate for his thought. Piaget also stresses this process:

. . . the child begins by borrowing from this collection (language) only as much as suits him, by remaining disdainfully ignorant of everything which exceeds his mental level. And again, that which is borrowed is assimilated in accordance with his intellectual structure; a word intended to carry a general concept at first engenders only a half-individual, half-socialized preconcept (the word "bird" thus evokes the familiar canary).³⁹

Learning concepts is an 'informing' process whereby the language structures receive the content of the child's cognitive structure and become increasingly complex with experience. Through using language he becomes aware of, able to express, and eventually to direct, his own thought.

Awareness and use, the two aspects of language acquisition, develop the child's tendency to pattern and order his thought to fit the forms that grammar dictates. Learning to think with language is, to a large extent, what must be nurtured in a programme of instruction, because it is only as the child can combine

language forms with personal meaning that he gains intellectual independence and a characteristic mental set.

Roger Brown and Jean Berko's classic study on word associations suggest that the child learns to assign concepts to word classes and that the increasing ability to associate words by part of speech is a consequence of the child's gradual organization of his vocabulary and, at the same time, his concepts, into the syntactic classes called parts of speech⁴⁰ or his own grammar. This is supported by the study of Susan Ervin-Tripp on "Changes in the Verbal Determinants of Word-Association", in which she used stimulus words with 184 subjects in kindergarten and first, third and sixth grades and tabulated their response words by form-classes. The results showed that there was an increase, with age, of words taken from the same grammatical class and that the association showed how the concepts of the child were organized around word determinants.⁴¹ This informs thought. Carroll says, "Concepts are essentially linguistic, but generalizations, both semantic and syntactic, are essential to the development of a coherent system of thought."⁴²

The mental activity which we call thought cannot be entirely abstract in the young child, therefore, language use is not a subsidiary of peripheral phenomenon, but is the concrete, or at least, active manifestation of developing thought processes. Although language can be, and is, converted into 'speech thought'⁴³, so that internal operations can be made with

language, the thought of the young child becomes operational only gradually, as Piaget has shown, and 'thinking aloud' is a childish strategy to track mental activity. The Piagetian technique of observing what and how children think by seeing what they say is possible because their thought processes are often 'inside out', that is, their thoughts are revealed in the spoken word because it not only expresses but creates their thought; they become conscious of the meaning by giving it oral language form. The Alice Syndrome can be seen as the result of the child's attempt to make the inner validity and external aspect of written language coincide. These terms are used to indicate the deep and surface structures of a psycholinguistic model of language, but they also carry a purely psychological import in that the conceptual purpose of language is to provide the child with an abstract way to represent reality and organize information about the world. This is why he has to see what he says, to know what he thinks - it makes the internal order of his language and thought observable by communication with another.

Piaget's experiments were to show that the mental organization of the child becomes logical, and reversible, that is to say directed, as a function of action and language.⁴⁴ He considered that all mental functioning occurs within a biological and active frame and that symbolic activity is preceded by physical schema; in simpler words, the child can substitute,

by degrees, language for action. Language and thought go through related stages in the child's development. In learning to think he is aided by having someone who can help him direct his thought by 'talking it out' if the concepts under discussion are appropriate to his intellectual development, otherwise the child's verbal behaviour will not correspond with his understanding. This simple fact must be given sufficient credence to develop a supportive learning environment; even after the child learns to write and has a command of language forms, he still needs much practise in pouring into the forms the rich and varied conglomerate of individual experience.

C. Language And Mental Organization

Piaget's explanations about children's language and concept formation have implications for this study. This section sets out in some detail the propositions which require exemplification and definition before they can be used to discuss the writing the subjects did. These are:

- 1) The child's way of thinking differs from adult thought;
- 2) The child's thought is egocentric;
- 3) The child's thought becomes socialized by a process of decentralization;
- 4) The child's language becomes socialized by adapting to the receiver;
- 5) The child's thinking can be autistic or directed;

- 6) The child learns to direct thought by reflection and logic; and,
 - 7) The child adapts egocentric language.
-
- 1) The child's way of thinking differs from adult thought:

Piaget's developmental theory of intelligence includes the assimilation and adaptation of information into a cognitive structure which accommodates to it by change. The cognitive structure is formed, dismantled and re-erected with every bit of new information. Thus, conceptual schema, as Piaget calls the early forms of thought, are submitted to redefinition as logical structures take precedence over subjective syncretistic order.⁴⁵

Piaget views the child's cognitive system to be the result of action and language. If language interprets experience, symbolizes thought and organizes information, it also serves, with action, to connect the individual to the social and physical environment. But, while language is the medium that translates action into thought, the young child is not able to replace action with abstraction before his cognitive structures are developed enough to enable him to attach meanings to words and organize concepts linguistically and logically.⁴⁶

- 2) The child's thought is egocentric:

Subjective distortion or egocentrism characterizes early thought. Piaget says the intelligence undergoes a gradual process of socialization and is enabled by the bond established between

thought and language to become objective. Language provides the organization of symbolic relationships, but at first the child's symbols and relationships are exceedingly egocentric, that is, they mean what he thinks they mean or they have no significance at all. His point of view is the only conceivable one and it is fundamental to both his thought and language.⁴⁷

- 3) The child's thought becomes socialized by a process of decentralization:

The process of decentralization makes it possible for the child to acquire an objectified view of himself and the world around him, thus he begins to use his language to project his ideas and communicate with others in a reciprocal way. The conceptual model of language as an ego projection in Figure III is based on Piaget's theory of intelligence expressed in Thought and Language of the Child, and illustrates how language is used for egocentric and socialized purposes.

- 4) The child's language becomes socialized by adapting to the receiver:

Piaget's experiments with language were specifically to discover more about child thought and he has extrapolated from his observations with children, types of language and stages of language development which are indicative of the mental activity of the child. He presupposes that, "The child has more in mind than he ever says", but that in early stages, because he is not conscious of thought, he is unable to direct it or benefit from it.

The growth of logic is the result of "reflexion" (Sic) which is ". . . the outcome of internal debate in which a conclusion is reached just as though the individual reproduced toward himself an attitude which previously he had adapted toward others."⁴⁸ The ability to analyze thought for order and objectivity with the purpose of adapting it to reality in a communicable form is the important result of socialization. Communicability of thought depends on the organization of the cognitive structure and the child's ability to make coherent verbal statements that meet the needs of the listener. It also pre-supposes that the child can direct his own thought.

5) The child's thinking can be autistic or directed:

Piaget premised that the child moves from autistic thought to directed thought and that the function of language changes at either end of the continuum.⁴⁹ Autistic thought is associational, vague, fragmentary and telescopic. Using "I" statements, not to communicate but to assimilate subjective symbolic material, the child develops his subconscious mental organization. Directed thought is adaptive and logical. It results in communicable ideas formulated according to the rules of grammar and the precepts of logic. It is reversible and operational, that is, it is abstract, dealing with concepts not objects. As directed thought develops from autistic thought, elliptical expression and syncretistic style is replaced by mediated conclusions arrived at

by a process of reflection and an objective point of view. Thus, thought can become conscious, not random.

- 6) The child learns to direct thought by reflection and logic:

Decentration is dependent on language and social interaction. Piaget says these are the two factors which influence the evolution of thought from intuitive, or autistic stage to directed, or mediated, forms. As this occurs, the high-ratio of egocentric to socialized language is reduced because the thought of the child ceases to be entirely egocentric. Egocentricity is explained as:

. . . a lack of co-ordination, a failure to group relations with other individuals as well as other objects . . . the primacy of one's own point of view.

. . . the expression of an original failure to differentiate, of an assimilation that distorts because it is determined by the only point of view which is possible at first.⁵⁰

It is the confrontation with social agents and the environment which forces the child to learn how to co-ordinate his perceptions and concepts with a socially acceptable view. In Piaget's view decentration presupposes social life. He premised that decentration was a developmental stage in the child's thought and was observable as a linguistic phenomena in the different type of language used which he called egocentric and socialized. Socialized language increased after :

. . . the appearance of a logical stage in which the phenomenon of reflexion becomes general; if we agree with Janet in calling reflexion the tendency to unify one's beliefs and systematize them with the object of avoiding contradiction.⁵¹

His division of language into categories relative to the process of decentration emphasizes the fact that children must be able to use social exchange to understand and be understood.

7) The child adapts egocentric language:

The two types of language, egocentric and socialized, serve different purposes and result from different mental sets. Piaget categorizes language according to function in Figure IV-egocentric purpose differs from social purposes.

In egocentric language the child is predominantly thinking aloud or communicating with himself while when he uses socialized language, he is primarily interested in communicating ideas and attempting to adapt his language to a receiver.⁵² He may also use egocentric language because he does not understand how ideas are connected and must resort to a syncretistic discourse. Piaget, in studying the two types of language in clinical experiments, was giving scientific support to Alice's intuitive statement about the purpose of egocentric language, that is, one knows what one thinks by seeing what one says.

Piaget's experiments to analyze the child's epistemology through language contains many variables. However, the conclusions that he reached do have importance in developing an understanding

of the language development that prefigure literacy. Figure IV synthesizes some of the propositions which have been discussed based on his experimental observations. In the next section a description of the characteristics of the two types of language will clarify the terms, and present research based on Piagetian principles that provide a basis for a study of literacy as the socialization and direction of thought in written language.

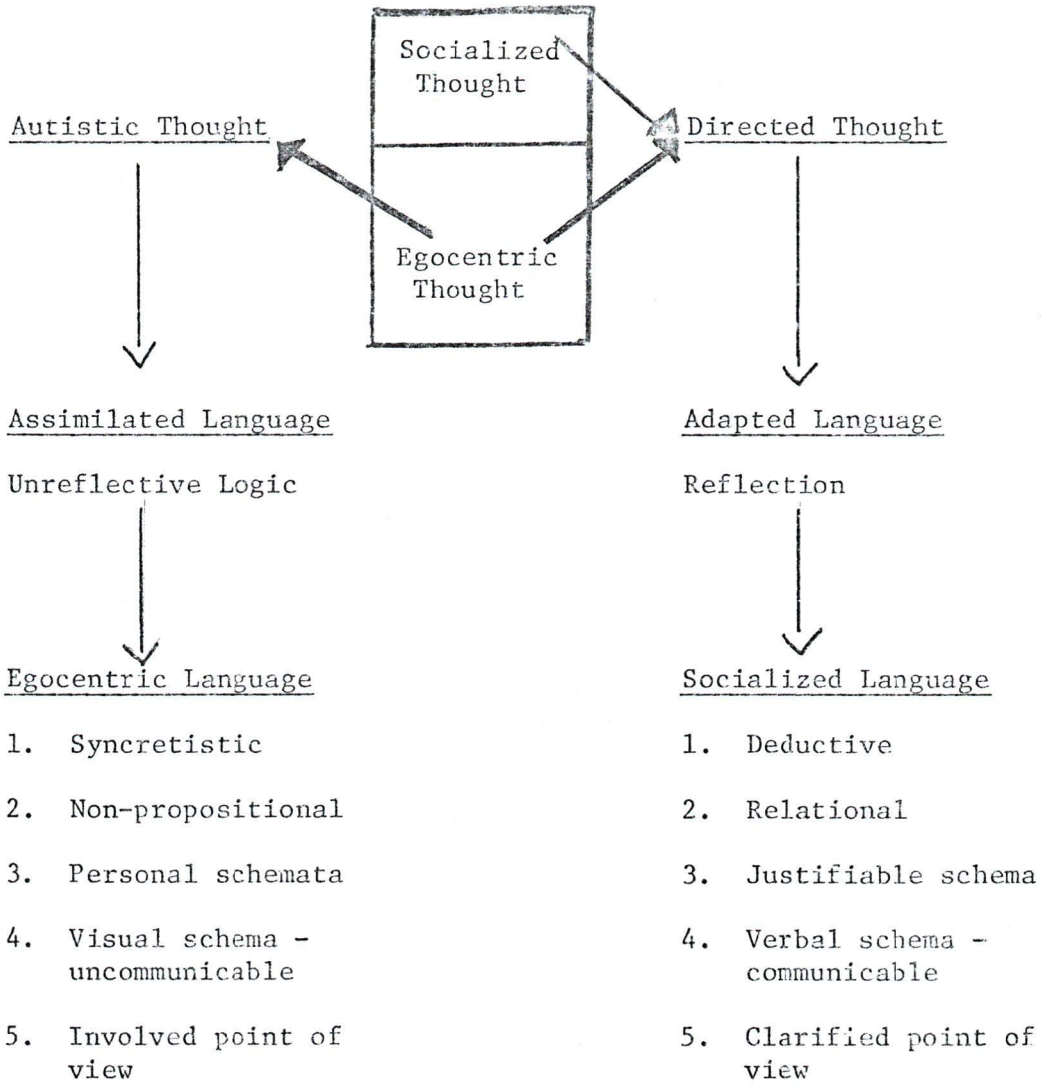
III. Egocentric Speech Forms

Piaget uses the term 'egocentric' to describe the tendency of the young child to give the impression of talking as if he were also his own listener. The child believes that any other listener knows what he himself knows. Research by Rardin and Moan⁵³ reported in an article "Peer Interaction and Cognitive Development", stresses the importance of stimulating language in the classroom because children think when they are encouraged to talk about what they are doing and seeing. Since the child is encouraged to continue using egocentric language when no one listens, or accepts or rejects his explanations prematurely, the need for conversation is intellectual as well as social. Piaget's comment on the necessity of social intercourse is:

It is therefore quite evident that social life affects the intelligence through the three media of language (signs), the content of interaction (intellectual values), and rules imposed on thought (collective logical or prelogical norms).⁵⁴

FIGURE 4

PIAGETIAN CONCEPT OF THOUGHT



Socialization of language occurs only when the need for it and the conceptual support for it exists. Piaget says that the proportion of socialized language to the total number of communication units increases when there is the right kind of adult interaction to direct the child's thought and provide suitable response to his questions and propositions.⁵⁵ Of course, egocentric language is spontaneously emitted by the child in accordance with subjective needs. Even when there is a high incidence of socialized speech, Piaget premises it is the thought to the child that is egocentric because he is bound by his own point of view which is reflected in his language - if there is no perceived need to communicate, there is no concern for the adjustment of point of view to socialize his thoughts.

A. Socialized Form, Language And Writing

(i) Causes of Socialization. Since intellectual development depends on the assimilation of information from the social and physical environment and proceeds by stages from intuitive thought to logical, reversible thought process; language adaptation takes place at the same time. The social factor changes the quality of the child's intelligence because it not only compels him to recognize new facts but provides the symbols to modify thought. The social context also contributes to the development of objectivity necessary for interaction; without the interchange of thought with others in the environment, the child could not develop objective

thought. Susan Isaacs pointed out in her study that children do show signs of logical reasoning very early, but that often they fail to apply the knowledge they have about the world⁵⁶; thus performance does not reflect their actual logical competence.

Piaget's research on language use shows that children are able to socialize thought quite early but they have to perceive the purpose. The shift from egocentric to socialized language does at first require extrinsic direction before it becomes intrinsic. The child receives from those who share his environment the impetus for socialization, although often he uses them only as stimulants to language and does not consider them recipients. Piaget's observation was that the adult can serve to help the child direct his thought but that this must be done with full understanding of the dynamics of the question/answer, stimulus/response format of interaction so that he provokes, elicits, confirms the actual response of the child and does not seek to impose verbal behaviour on the child who is not ready. He premises that egocentric language will predominate in speech and serve most of the child's intellectual need up to the time decentration takes place, unless an adult intervenes to help him socialize his communication.

(ii) Effect of Socialization. What happens to the child when decentration takes place? It is not a dramatic observable process; eventually, it will allow the child, however, to observe his own thought or know what he thinks before he sees

what he says. Intellectual egocentrism in Piaget's work is equated with the irreversibility of thought - that is, the origins, development and effects of the conceptual activity are unobserved by the child, and not coordinated with any other point of view. When he 'decenters' his point of view, he is able to focus on intellectual operations and recognize any disequilibrium between his logic and the logic of others; thus, it affects his communication with them. Britten states that, in writing, the child is able, as decentration occurs, to become a 'spectator' to his own thought.⁵⁷ Vygotsky's concept was that thought was born through words as it was interiorized as inner speech⁵⁸; in internal dialogue with himself the child is able to clarify his point of view and therefore the effect on his thought process is great. This too, can have the effect of socializing the child's language as he is better able to communicate with others after he can enter into dialogue with himself.

Chase's evolutionary theory⁵⁹ states that language aids socialization because it forms part of the broad continuum of information exchange:

- 1) to regulate and integrate experience;
- 2) to satisfy the individual's sensory and social needs;
- 3) to improve the specificity and efficiency of thought;
- 4) to facilitate and develop a capacity to process and transmit information; and,

- 5) to systematize group communication by the evolution of appropriate mediated structure.

It is applicable also here as an appropriate representation of the effect of socialization of written language.

Decentration, as one other developmental stage in Piaget's theory of intelligence, is part of this broad continuum, and its effects are diffused rather than definite. Piaget's experiments with the concepts of egocentric language and socialized language was one way of quantifying the results of decentration. He established a coefficient for the ages at which the child is most likely to go through this stage of development by establishing a measure of egocentrism in the categories of language that the child used. Table II presents the Piagetian categories of speech by which he tabulated the communication units in the child's speech and converted the number of average responses that fitted the egocentric category to a coefficient. The formula for the coefficient was:

$$\frac{\text{Units of Egocentric Language}}{\text{Units of Total Spontaneous Language}} \times 100$$

Table I demonstrates his results. This, he hypothesized, indicated that by age eight intellectual egocentrism had diminished and the normal child was able to take a decentered point of view.

TABLE I

PERCENTAGES OF EGOCENTRIC LANGUAGE IN SPEECH

Piaget's Results

Age 6 - 7	44 - 47 %
Age 7 - 8	27 %

TABLE II

PIAGETIAN CATEGORIES OF SPEECH

Total Communication Units

A. Egocentric Language

- I. Echolalia - Word repetition
Phrase repetition
Incoherent sounds - language play
- II. Monologue - 1. Accompanying action
2. Commanding self
3. Inventing
4. Language play
- III. Collective Monologue - 1. Intent
2. Feeling
3. Fact
4. Self-reference
5. Opinion

B. Socialized (Adapted) Language

- I. Dialogue - 1. Information
2. Self-reference
3. Propositional response
- II. Criticism - 1. Personal depreciation
affective statement 2. Personal aggrandizement
3. Depreciation of people
4. Aggrandizement of others
- III. Question - 1. Pseudo-question
2. Request for information
3. Request for explanation
4. Inquiry about others
- IV. Answers - 1. Information
2. Explanation
3. Response to inquiry
- V. Unclassified - e.g. mazes

(iii) Regression. The older child is capable of objective, decentered thought, in fact, however, there are frequent regressions to use of egocentric thought and language through life because they serve a very important function. Whenever the purpose of communication is not clear or the conceptual order is not clear, a high incidence of egocentric language reappears, resulting in ambiguous, amorphous or even anomalous statements. In the early stages of written communication, concepts are difficult to express in the new form and a regression along Chase's continuum occurs. A pilot study was done to discover if there was a higher incidence of egocentric language in early writing than in children's speech after it had been compared with Piaget's study. Piaget's categories of spoken language were then adapted to written expression and called counter-parts of Piagetian Categories of Speech. Results of the study are indicated in Table III and reported further in Appendix III.

TABLE III

PERCENTAGES OF EGOCENTRIC LANGUAGE IN SPEECH AND WRITING

	Piaget's Study	Pilot Study	Writing
Age 6 - 7	44 - 47 %	45 %	83 %
Age 7 - 8	27 %	27.9 %	68.5 %

Indications of the pilot study are that there is a regression to less fluent or coherent forms of expression because egocentric language approximately doubled that recorded in the oral speech of the subjects. This required explanation and was taken as the problem which could be explored in case studies for this thesis.

(iv) Direction Of Thought For Written Expression. Ego-centric thought differs from directed thought in communicability, logic and coherence. Directed thinking is an important development for the acquisition of literacy since all the sub-systems of thought when writing is learned must be coordinated, that is, to write, the child has to integrate form and information in a coherent statement. This has some relevance to written language. It is seen as the direction of thought for communication.

The theories of mental organization and the emergence of directed language as an indication of the development of the symbolic process seen as the foundation for the writing/reading process is discussed in a dissertation by Cannon on The Reading Process In The Perspective Of Piagetian Theory.⁶⁰ Cannon concludes that print/reading will develop naturally in much the same way as spoken language does if we allow it to. The best educational environment for reading and writing encourages language use in peer social interaction and physical manipulation of concrete objects which tends to promote both language development

and logical mental development.⁶¹ Formal reading or writing programmes that do not take into account the child's experiential background, social sophistication and internal mental structures will not serve language development or mental development, which Cannon sees as interrelated. The case could as well be made for the production as for the interpretation of written language.

IV. Performance - Information In Communicable Form

A psycholinguistic approach to the writing/reading process is relatively new and research is needed to understand its implications for improving performance. It is based on a conceptualization of writing - both act and process, as a performance skill the child can learn as naturally as he does speech, if allowed to.

Alvina Burrows, in her review of the research done in the 1960's, indicated the major areas which were in need of study. In the last decade, many of them have been explored, but the psycholinguistic approach will emphasize research to:

- 1) discover the thought process necessary to acquire literacy;
- 2) determine the connection in the child's mind between speech and script; and,
- 3) develop an efficient method for the child to make the transition from speech to script.

A. Methods For Motivating Written Language

(i) Developing Associations. The child needs to write about something - if he has nothing to say he will be frustrated.

The teacher's role in motivation has been considered by Hughes Mearns⁶² and David Holbrook⁶³, who were early theorists in stimulating creative written work, to be that of providing a supportive atmosphere and an appreciative audience. In this sense, the appreciative audience is also critically sensitive to how the child makes associations so these can be fostered to help the child find his own source of inspiration for writing, in the things he knows and thinks. This, of course, has much to commend it in Mearns' view. He says good teaching is not solely the business of instruction, it is also the art of influencing nature's gift of insight, feeling and thinking.⁶⁴ Recently, the work of Kenneth Koch shows that children's early writing has a poetic quality that can be nurtured by getting them to put free association techniques to use in writing poetry.⁶⁵ These have been successful and have done much to free children from imposed topics, which Nelson found greatly influenced the content and style of six and seven year old children's composition.⁶⁶

(ii) Fostering Originality. The formula in Table IV developed by Logan⁶⁷ serves as a theoretical guideline to motivation and evaluation of the originality of the written product, which seem valid from both methodological and psycholinguistic points of view.

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TABLE IV

FORMULA FOR GUIDING CREATIVE WRITING

Phases Of Creative Process	The Child	The Teacher
Cognition	Becomes aware of the desire to write (usually as a result of reception of language (literature) or real experience.	Provides the stimulus for writing (literature or experience). Creates climate for expression - (supportive, non-judgemental).
Conception	Toys with ideas. Considers possibilities (examines literary models, selects words and structures for symbolism, considers archetypes).	Stands by to give help - may review language concepts from literature, e.g., archetypes, words.
Combustion	Discovers the ideas and begins to write.	Provides encouragement and technical help.
Consummation	Completes the writing - checks his work against the literary model or with teacher.	Provides guidance in use of forms and structures of writing.
Communication	Shares creative product if he chooses.	Listens with interest, provides for publication, shares own writing with group.

Studies in creativity have not provided unequivocal conclusions about how original writing can be fostered. It is true that the creative process is unpredictable but as Teidt has emphasized in her study of children's creative writing, if children feel secure they will take risks in exploring the possibilities for written expression.⁶⁸ Judgemental attitudes, she states, inhibit rather than inspire originality.

(iii) Enriching The Imagination. The image-making power of language is nowhere more important than in the writing process. Piaget has discussed children's imagery as indicative of their stage of development and Bruner named it as one of the sources of concept building. But children do not always recognize that their imagination, or their "picture-making in the eyes" is a source of ideas for writing. Any artist uses the trick of 'seeing with the inner eye', in fact, it is the logical outcome of the 'Alice Syndrome'. Much of the writing that has been done on motivating children to write has provided suggestions for developing the power of the imagination. Books such as Slithery Snakes and Other Aids to Children's Writing by Petty and Bowen, and Applegate's Freeing Children to Write, are sources for imaginative play with children. While it is indisputably important, the research is not conclusive about the best method to help children use their imagination or indeed, what effect the devices used to stimulate the imagination actually have on

the writing process. It may be that it is not possible to show any significant correlation although much of the research and comment in the literature is centered around methods of stimulating children to write.

Torrance and Fortson⁶⁹ conducted a study with pre-schoolers designed to improve imaginative thinking, fluency of ideas and verbal expression and found that the treatment group exceeded on all counts the performance of the control group. In an article entitled, "Ten Ways of Helping Young Children Gifted in Creative Writing and Speech"⁷⁰, Torrance outlines his ideas with a strong recommendation for developing the imagination in ten categories, which he then elaborates:

- 1) provide materials which develop imagination;
- 2) provide materials which enrich imagery;
- 3) permit time for daydreaming and thinking;
- 4) encourage children to record their ideas and image;
- 5) give children's writing concrete embodiment;
- 6) accept the child's tendency to take a different look;
- 7) praise rather than punish individuality;
- 8) be cautious about editing children's writing;
- 9) encourage children to play with words; and,
- 10) love them and let them know it.

These headings serve as a rather good synopsis of what is reported in the literature as the approach to use to nurture both imagination and creative expression. A rather more objective study done by May and Tabachnik⁷¹ used two stimuli, non-representational figures, called an unorganized stimulus, and an organized stimulus - a picture, as the motivation for story writing and they found that there was not a significant difference between the two but that a tendency was noticed toward the unorganized stimuli to result in more creative stories.

Torrance discusses the use of literature as a stimulus for the imagination to foster writing. He says: "These materials have not been subjected to very much scientific testing, but on the basis of what we know I would assume that they provide rather sound approaches." He gives his reason for his conclusions: "With such materials you are doing more than developing the imagination, you are developing the ability to think in possibilities."⁷² This, of course, is consonant with the approach of Mearnes, Holbrook and Koch, quoted in the last section.

(iv) Stimulating Discussion. The connection between oral language and the child's written work has long been taken for granted in the practise of discussion as a motivation prior to the writing act. Curriculum guides stress the inter-relatedness of the receptive and expressive functions of language,

that oral language and written language must be considered together. Several studies have attempted to specify how discussion affects the written output of students: Anderson and Bashaw⁷³ preceded composition writing in the first grade with "treatment discussion periods" and found that descriptive discussion as opposed to argumentative or thematic development was more successful; Bressman; Rozen and Taft⁷⁴ report that there is a beneficial effect of talking before writing; Britton, with a theoretical rather than a research based point of view, emphasized that talk should be the first stage of written expression. Burrows states on the basis of her observations that children need opportunities to talk about what they are going to write.

(v) Motivation. It was significantly reported by Francis Litwin⁷⁵ that the writing done after dramatization consistently showed greater creativity and fluency than writing motivated by picture or discussion stimulation. Three groups were made for the study, one was given pictures only, one group was led in discussion about experiences related to the picture and the final group was involved in dramatic and improvisational play about the picture. The compositions were mixed and sent to different literary judges who examined them for style and creativity. When the results were tabulated, the group who had been able to play out their ideas had more variety, description and complexity in their writing. A study done with young children

by Saltz and Johnson reported that children involved in fantasy play in the role enactment of imaginative stories were significantly superior to the control group in oral expression.⁷⁶

(vi) Dictation Assistance. As a method of stimulating children's ability to write, dictation procedures have seemed to produce excellent results since they integrate the language-experience approach with the physical assistance and the subject organization that the beginning writer needs. Experiencing the permanence of his own language as it is converted to script is a powerful aid for the child to learn the correspondence of the two types of language. All of the studies on dictation have been clear in their conclusions that children learn much about language and their stories were expressive and natural with this method. None to date have been specifically designed as the major means by which they discover the principles of literacy, but several have results that could be interpreted from the psycholinguist's point of view.

Perine⁷⁷ studied dictation in early grades using both scribes and tape recorders and found that children produced fluent stories in this method and enjoyed reading them to others; Strickland advocates but did not research, the use of dictation methods to initiate expression in writing. Howell⁷⁸ made a detailed study of the difference between written and dictated stories by seven year olds; in this study, each child wrote a

story after motivation procedures and then was able to dictate a similar story to a scribe. Dictated compositions were analyzed for running words, number of different words, number of generalizations and were found to increase in length, variety of words and generalization or, in other words, socialized language, over the ten month period. The dictated stories on all counts, except in the amount of generalization, exceeded self-written narrative. That the generalizations did not increase significantly between dictated and self-written stories shows an interesting facet of mental development; it would be supported by the Piagetian analysis of egocentric language at approximately seven years of age which remains as a constant coefficient. Longitudinal research would be needed to analyze the type and form of generalizable statements as children socialize their language to explain some of the transitional stages.

Burrows strongly recommends dictation practises to stimulate early writing and has developed guidelines for teachers to use. She sees dictation as having subsidiary benefits.

Though dictation by individuals has the advantage of producing intense concentration as well as the virtue of almost immediate and complete recall by the author, there are some values unique to group dictation. Children stimulate one another. Hearing and later reading what others have said contributes to the ongoing process of socialization. Noticing how other different people's ideas and sentences fit together into a sequence is still another learning of considerable merit.⁷⁹

The results gained by researchers using the dictation method seemed to indicate as a premise for this study that children learn to write by applying psycholinguistic principles and that this idea required more support through experimentation.

B. Strategies For Instruction In Written Language

(i) Recognition Of Reason For Writing. Teachers have tried to devise methods that will make children aware of their purposes in written communication and give them reasons for improvement on the basis of what is, that is, the written product or what should be - the models, what could be - in terms of future writing purposes and skills based on the child's needs and interest. This must be the primary reason for instruction. The basic research on children's writing indicates that children do need purpose and instruction to improve their writing skills. Strengthening the reasons for writing must have some effect on the written production of children. Much research has dealt with this relationship of purpose and product to discover what instruction techniques develop the basic language skills of:

- a) flexibility and range;
- b) adaptability to purpose; and
- c) suitability to the receiver.

A valid curriculum will strike a balance between providing purpose and encouraging free expression and directing skill-learning to help children develop the standards and reasons to make progress in written expression.

(ii) Development Of Principles Of Writing. Principles which can guide instructors in structuring sound writing programmes are necessary. Semantic competence is necessary for writing skill. Table V has been developed by Evans.⁸⁰

TABLE V

PRINCIPLES OF DEVELOPING SEMANTIC COMPETENCE

- A. The programme must be based on an adequate theory of how words achieve meaning.
- B. The programme must be focused on the child's use of language in level and dialect.
- C. Experience with referents and the opportunity to attach verbal symbols to them should be the basic process.
- D. There should be an inductive discovery by the child of precision in meaning and the deductive application of his insight to real communication situations.
- E. Development of meaning should proceed from depth to extensiveness.
- F. Oral language behavior is central to development of meaning where children manipulate concepts to communicate them effectively.
- G. Terminology is essential only in discussing features of meaning after these have been learned inductively.
- H. Semantic development must be part of a total communication programme.

Grammatical instruction must support the writing programme.

Armstrong clearly states principles in Table VI. A programme

based on these principles will provide purposes for writing which are understandable to the child.⁸¹

TABLE VI

PRINCIPLES OF TEACHING GRAMMAR

- A. The programme must be based on a good grammar; i.e., a sound description of how language communicates meaning.
- B. A maximum use of the child's own language must be used in language activities.
- C. Fluency, particularly in initial stages in the development of any new concept, is of paramount importance on which control is gradually imposed.
- D. Inductive discovery by the child of how his own language works and a deductive application to problems in communication should be the basic approach to learning.
- E. Synthesis as a characteristic of the teaching technique rather than analysis should be the teacher's basic orientation.
- F. The use of oral language is important during the discovery and initial stages of application - followed by a transition to written language.
- G. Terminology is never essential and must never blur the need to discover and apply understanding.
- H. Grammar must be part of a sound and stimulating programme in which children feel the need to communicate with other children.

These, though referring to oral language, are also the most useful principles for developing written skill as well.

(iii) Organization Of Language Knowledge For Writing. Syntactic structure and grammatical principles must be learned by children in some way. The effect of grammar teaching on the quality and complexity of children's written structures is a research issue. Instruction on topic sentences construction, punctuation, descriptive words and similar skills has been used to help children improve their writing.

This kind of instruction, basically deductive, presents "rules" which the child is expected to understand, internalize, and follow, regardless of maturity, interests or felt needs. It often uses other people's language, rather than the child's in its reliance on exercises, drills and models and locks whole classes into preconceived sequences of instructional steps.⁸²

Bloomfield has been quoted by Botel as saying that the only useful generalizations about language are inductive⁸³ and this hypothesis has been supported by research. While there has been considerable disagreement about the most appropriate way to teach structure, there is agreement in the research literature that older children write more complex sentences. O'Donnell⁸⁴ studied upper grade children's stories and found their control of syntax was better in writing than in oral language.

Kellog Hunt has written the very comprehensive report on "Grammatical Structures Written At Three Grade Levels"⁸⁵ of how children organize syntax. He studied the syntactic complexity of children's writing and concluded that they become more proficient in using transformational grammar rules and embedding

information in longer sentence units. His T-unit, that is, the shortest sequence that can be ended by terminal punctuation, has become the standard measure in most language research. He found that the T-unit regularly became more complex as children got older and that this is partly an outcome of their ability to relate complex ideas and partly more experience with language possibilities. This, he concluded, should indicate how the school can contribute to development and generation of effective language by suggesting appropriate times to study the structures inductively as they appear and become common in children's writing.

Loban's study "The Language Of Elementary School Children"⁸⁶ demonstrates that children use increasingly complex structures in speaking and writing and suggests that this should influence the teaching of grammar skills. Most of the research studies on grammar and linguistic analysis as it affects composition has been done with upper grade children and has compared traditional scheduled and transformational approaches to grammar.

(iv) Application Of Language Knowledge In Writing. The Weehawken Title III project has been one of the most valuable recent research works on children's composition throughout the grades. Reported under the title "Applied Linguistics: A Discovery Approach To The Teaching Of Writing, Grades K-12"⁸⁷, Ezor and Lane have developed methods that exemplify the principles in Tables V and VI to improve children's writing.

They have tried to demonstrate that teaching 'structure', if approached from the child's needs, interests and language ability, can facilitate writing. The project ran for six years with a wide sample and produced significant results that show that motivation and directed instruction can be combined.

The intent of the programme was to use "language experience" motivation and structure the language instruction or linguistic principals on inductive discoveries by the child experimenting with his own language. For this reason, it was based on the oral language competence of the children. The researchers developed techniques which the child could learn to use on his own to plan, write and improve his compositions: the techniques were then used to diagnose strengths and weakness in the children's writing and prescribe corrective measures and it was expected that the child could improve his written composition between the initial diagnosis and the final draft. The criteria for syntactic growth were taken in part from Kellog Hunt's study. The statistics resulting from the project showed that, on the basis of Hunt's T-unit measure children in the sixth grade made a gain of 45 per cent in the average length of the T-unit in the course of the year; predictions about growth of writing proficiency of all children in the project proved to be 90 per cent correct. The techniques and recommendations resulting from the project are now being adapted in many other school districts as a valid way to teach literacy skills.

The statistics showed that the Weehawken children were now writing longer, richer and more varied sentences The Weehawken children were also writing longer dependent clauses, using more series of words and of word groups, moving parts of their sentences around to a larger extent to vary their writing style and give better emphasis to the most important words and phrases. Even at the third grade level they tended to write a higher proportion of complex and compound sentences, and fewer simple sentences as the year went on. A follow-up statistical evaluation indicated that these same children had generally continued to show improvement in their writing.⁸⁸

The success of this project will give an impetus to further research in the field of children's writing and provide a sound scientific base for development of theories of instruction. Its emphasis was not ostensibly psycholinguistic but the use of the child's oral language, the types of instruction and generalizations indicate that the premises of this study have some research precedent.

One formulation of a psycholinguistic model of the writing process is called by the author, James Ney, "a preliminary sketch" because it does not explain the writing process in global terms.⁸⁹ However, it is significant that he builds his research on two other important studies with psycholinguistic explanations for their conclusions by Mellon⁹⁰ and O'Hare.⁹¹ They have used sentence joining devices which result in embedding and composition of denser surface structures by students in the test group than those in the control. They both found that there was transfer to the children's spontaneous written work and the overall

compositional quality was increased. These studies verify and extend the basic work done by Hunt, Loban and others that children's language structures are acquired in an orderly fashion and that instruction does not change use unless the child's syntactical development is appropriate. That is, the underlying cognitive structures must be able to support the syntactic patterns which are being taught. Ney explains, in a study of fourth graders, that ". . . the psycholinguistic model may account for sentence synonymity and the fact that young children can perform some syntactic operations on sentences but not others."⁹²

Ney's model is related to the L.A.D. of Miller's research, but he shows how meaning is filtered through a syntactic grid and stored as semantic units before it is processed again through the syntactic grid as written output. He says that similar grids, or rings, could account for phonological and graphological coding and decoding. Because subjects in the study wrote more freely and produced more in a given time, Ney states, ". . . whatever psycholinguistic model is finally postulated to embrace effects noted in transformational sentence combining exercises, it will have to include a mechanism which accounts for the improvement of decoding and encoding skills."⁹³ He explains how writers draw information from the reservoir of meaning in the psycholinguistic model of the writing process.

In writing then, the student must reprocess the semantic form after it is processed through a syntactic grid before receiving surface forms of written sentences.⁹⁴

What Ney is postulating is that although the child becomes more conscious of his language resources, he improves mainly because he is using language for his own purposes so he learns through practise in manipulating form and content to make generalizations for his own use. This is equivalent to experimental manipulation by the child of language structures.

(v) Use of Models For Writing. Psycholinguistically, the first stage in learning language skill is observation leading to generalization about purpose, form and content. This is assumed in this study to be true for written language as well as for speech. There must be an abundance of written language for the child to model. In an earlier section reference was made to the inductive discovery of form and meaning. This principle is mentioned in Tables V and VI. This implies directed observation by the child. Some research has addressed this aspect of teaching writing and significant results have been shown by using models as a means of instruction.

For example, Bryant, quoted in Cazden, suggests there are qualitative differences between oral and written language and that children benefit from experiences with reading to observe what are subtle and apparent differences that could be taught only laboriously. Cazden adds comments that reading aloud to young

children gives them practise in comprehending, and gaining competence for using written forms and provides both the motivation and the models for writing.⁹⁵

In a book written in support of this principle, Read To Write, Stewig questions how a basic competence can best be taught and how the essential performance skills can be learned; he concludes that literature is an excellent springboard to children's own writing and has used his own experiences to validate it. He appeals to teachers to adopt this method experimentally so that conclusions can be tested.

This approach is quite new . . . it needs further testing over a period of years to determine if in fact, children who experience such a programme are better writers at the end of the elementary school The fundamental assumption is that writing is a skill One reason why teaching writing is difficult is that writing skills are acquired slowly over an extended period of time. Another reason is that sequential, organized composition programmes designed to help children learn writing skills are rare. This programme is based on four components:

- a) intensive literature input;
- b) written assignments based on literature models;
- c) written assignments based on observations of writing; and,
- d) editing as a means of improving compositions.⁹⁶

With these four elements teachers can do much motivation, instruction and evaluation of children's writing; this seems a

valid approach, psycholinguistically.

One project on imitation of models is reported by Cramer⁹⁷, who found that work with models developed "the inner ear" needed for written style, because it showed children the devices which make writing interesting. His thesis has four main points:

- a) Children are exposed to writing models as an instructional strategy;
- b) Children are motivated to continue writing;
- c) Children experience success in patterning their writing on good models; and,
- d) Children gain pride of authorship and raise their own standards of evaluation.

Cramer has developed eight guidelines for patterning that are in keeping with semantic and syntactic principles. When a comparison is made between how many models of oral language the child needed to gain competence and the amount of practise he had to have before he gained any degree of proficiency, it is understandable why learning to write is such a long process and why the percentage of time the child spends composing, not just copying writing, in most school days is inadequate to develop the literacy skills we expect at a very early age. This study is concerned with the possibility of making this process more efficient by helping the child produce his own models and devise his own purposes. Research on Methods of Motivation and Strategies of Instruction have been discussed in the section but research on evaluation, as the final step in the writing process, is reported under the next heading.

V. Transforming - Developing Performance Skill

The clue to finding ways to nurture children's writing is found in the writing they are able to produce. The process of evaluation is a necessary part of the cycle of improvement because it is only by transforming the forms that they are able to use will their writing become more complex, refined and appropriate. Referring again to the 'Alice Syndrome' the clue is in getting them to 'see' what they have said and find ways to say it better. The purpose of the transformation process is to synthesize effective language usage and the child's thought in performance skills that become increasingly flexible and suitable to the communication process this requires. Since the young child has an egocentric point of view, communication skills have to be developed so that he is aware of his intent to convey information and can analyze the forms used in his writing for their improvement. Cazden comments on the necessity for the child to develop a perspective of the communication process during the early years.

During the elementary years all the requisite ideas develop. A child's rate of development may be affected by the range of situations in which he is forced to consider alternative points of view in order to achieve his communicative intent.⁹⁸

This is what was done deliberately and consistently in the Weehawken project; the evaluation and correction of children's written language is to keep children writing and making progress commensurate with their ability.

Correction and evaluation are important sources of new information about language forms; they refine the possibilities for ways of thinking and communicating that the child needs to both improve his performance and master the communication process. The literature reports many attempts to find an effective evaluation method for writing and many studies have been done on the effect of correction on written products. As part of the psycholinguistic process approach, evaluation and correction must lead to the child's inductive generalizations about language and his own performance by making him aware of form and purpose.

A. Correction

Teachers' attitudes to children's writing will dictate personal approaches, therefore, the question that precedes all corrective measures is: What end is correction serving? Three main answers, other than what can be considered the 'habit' of red-pencilling errors⁹⁹ are:

- 1) standardization of forms in performance;
- 2) inspiration for future performance; and
- 3) publication of performance.

1) Standardization

Kenneth Goodman, who worked with miscue analysis in reading, proposes that a similar method be adopted by the teacher of composition.¹⁰⁰ His rationale is that if patterns of difficulty

are recognized by the teacher on the basis of the child's written language, strategies can be devised to make the child correct his own mistakes. This is applicable to the mechanics of writing such as spelling and punctuation as well as to the use of language forms and styles of presentation. It allows the child at the same time, to recognize his strength and see the teacher as an assistant in the communication process. "In this spirit, the teacher can safely raise questions and offer suggestions much as the friendly critic operates in support of a writer."¹⁰¹ This aids standardization. Eventually, the children, as they did in the Weehawken project, could move from first draft, through to corrected copy with an understanding of the process: this Goodman considers to be the best education for writing. The child makes the actual changes, ". . . while the teacher bases his critical advice on meaning and language conventions broadly conceived"¹⁰²; standardization of forms in this way is a part of the psycholinguistic learning process.

The proof reading skills children need should be part of the instructional process. Laubner's study¹⁰³ showed that students composition improved significantly if self-help devices were used. These involved use of a proof reading card, constant proofreading and immediate feedback on the corrected copy.

2) Inspiration

Correction, to serve the child's purpose, must assist him in avoiding the same mistakes in the future; he must be part of the correction process. To reiterate the bias of this study, the child gains control of the process of communication through use and feedback about usage. Correction that does not lead to the child's own control of his expression is unproductive, therefore, the teacher's feedback about his written language should give him information about his performance which will help him alter the forms he uses to ones which better suit his intent to communicate. The teacher, in providing this feedback, must inspire confidence or desire to continue writing so that the child gains by experience what he could never gain by direct instruction. This is similar to "L.A.D." theory of language acquisition which has been discussed. The idea of inspiration of children's future writing through correction depends on the privileged relationships that exist between student/writer and critic/teacher. Research studies on the effect of criticism have, however, varied points of view on the efficacy of criticism. Patrick Groff has reviewed these studies in, "Does Negative Criticism Discourage Children's Compositions?". He reports that¹⁰⁴: Taylor and Hoedt showed that the teacher's written praise was superior in effect on quality of future writing to critical markings and reported that the praised group wrote more, and

wrote more independently than those who were criticized; Biberstine has demonstrated that the teacher's negative comments or marks had a detrimental effect on future writing and that even though positive oral comments were given to students the effect was cancelled; Nikoloff's study showed no significant difference in the stories written by children for critical teachers than for non-critical ones. Most writers in the literature state that teacher's attitudes play an important role in inspiring children to write¹⁰⁵ and that comments, or even criticism, perceived by the child as helpful will be accepted. In other words, they are not psychologically deterred from writing, and writing better, if teachers do not simply praise but involve themselves in the process of evaluation and correction.

3) Publication

All sources referred to on children's writing note that publication can be seen by the child as a final step in the process of composition and that it can serve as motivation in itself as well as a means to teach standards. The approaches to publication differ to a wide degree, from Hughes Mearns, who sees it as a transgression of the child's privacy, to Britten who justifies it by saying, "Why should literature be something other people have done?"¹⁰⁶ Burrows believes it is of benefit to the pupil to feel he is a successful author because if he is treated like one he need not be defensive. She states there ought

to be two kinds of writing - the private, and the public and that the child who can see the purpose of the hard work necessary to put the first draft into a form to be read by others will improve his standards and be motivated to write more.

When papers in good form are mounted and displayed and approved by one's peers, satisfaction is engendered in the very learnings that we have long tried to improve This is a far different experience from the conventional mounting on a bulletin board of corrected or revised first drafts complete with teacher's comment and grades! Such exposure leads to embarrassment for the pupils who most need self confidence. The viewing of one's work in attractive form . . . is a powerful builder of further energies for writing.¹⁰⁷

Despite the general consensus that the publication is part of the writing process, no research studies were reported that explored the effect of publication on quality, creativity or improvement of standards. It remains then as a psychological supposition, that all factors considered, publication is a logical and purposeful outcome of a composition programme.

B. Evaluation

Children learn standards for their writing as they learn to evaluate for themselves the effectiveness of their expression. Teachers' evaluation must relate in practical terms to how the child can reach the standards expected of him and raise his own standards. Sager's study, "Improving The Quality Of Written Composition Through Pupil Use Of A Rating Scale"¹⁰⁸ is based on

this premise. She developed the scale for compositions based on:

- a) vocabulary richness and suitability;
- b) elaboration of related ideas flowing smoothly;
- c) organization of the ideas; and,
- d) structure of language forms.

Children used the scale to rate their own compositions as well as the compositions of others and the effect in their writing progress was subjected to scientific research. The results were conclusive that children's writing improved qualitatively in all areas.

The focus of the study was to help children see what detracts from effective communication and what makes written expression understandable and interesting to the reader. This, in effect, was helping them to socialize their language, in Piagetian terms, and take another view than the egocentric. The methods for children evaluating their stories were carefully controlled. Statistical analysis of the results showed very significant gains of the test group over the control group; Sager's conclusions were that children's standards were raised by the knowledge gained through the use of the scale. The prime reason given for their improvement was that the students were enabled by the instruction given in evaluation to be responsible for setting standards and judging their own progress. This gave them the confidence to be critical of their own writing and gain an

objective view necessary for any development of standards and improvement of performance. Some of Sager's subjective conclusions were that the children engaged in the study recognized that rewriting was an essential part of the composition process. As they gained ability to diagnose the weaknesses in their writing they were not content to leave it in the first draft. The positive benefit of the 'language experience' approach makes it possible for every child to gain a measure of success and even children working below grade level were able to use the rating scale. It was a distinct benefit that the correcting of stories became the student's responsibility to a large degree and the teacher's task became, as Goodman advocates¹⁰⁹, analysis of the stories for recurring patterns and weaknesses which could be the basis of further individual or large group instruction.

Sager's project is in contrast to one done by Martin in which teacher evaluation of children's stories were studied for consistency, in matters of content, organization, vocabulary and creativity.¹¹⁰ The mechanical errors were taken as an index of quality and it was found that teachers' qualitative judgements had most correlation with these errors; in other words, since rating of stories was directly dependent on mechanical errors, Martin concluded that the child's creative writing should not be related by this standard as it involved a much more complex interaction of skills, motivation and language learning than can be judged simply by errors in spelling, punctuation and even use

of forms. He recommended that post instruction sessions should stress discussion of standards and suggestions for modification rather than judgements of errors.

Both these important studies have implications that are relevant to the psycholinguistic approach to early writing under discussion in the present study. The cycle represented by the concept in Figure 2, Form; Inform; Perform; Transform; provides for continuous learning and evaluation leading to progressively more complex, sophisticated and effective written communication. Burrows stresses that evaluation of the child's early writing should be part of the total language programme and is a continuous process in which the teacher uses all the information gained from observation of the child's writing to determine ways to help the child develop his own standards based on successful performance and increased awareness of form in his writing and the writing of others. She also says, "A child's imaginative production is among other things, a means of integrating his inner and outer world - to grade this process takes more astuteness than we now possess."¹¹¹

Britten makes a statement that cogently summarizes the common approach taken to evaluation in the literature:

Standards of acceptability are of course important and it is important that the children know that we care about the conventions of written form. It is also important that we exercise patience with regard to expecting them . . . that language should do justice to experience is a much more important standard.¹¹²

This says more than it seems to because, indeed, language will do justice to experience only if it does meet the standards of effective expression and is adaptable, explicit and natural. The expectations for children to develop these standards of effective written communication require patience, of course, but a programme of instruction that can help them feel the success and enjoyment of writing as soon as possible and with as little loss of the spontaneous, creative and sensible language they are able to use, will enable them to do justice to their experience in written expression. This is what has been postulated here, as the "nurture" of children's writing skills. Nurturing children's written language depends on decisions made about the nature of the process. Learning to write should nearly approximate natural language learning to make acquisition of literacy a successful process for young children.

CHAPTER THREE

RESEARCH DESIGN

The study is designed to help children write longer, more complex and more coherent stories with the assistance of a scribe. It is postulated the benefits of the scribing encounter transfer to independent writing. The research design, therefore, is clinical and descriptive as well as statistical to allow for close examination of individual children's writing and to prepare case studies of the subjects. These case studies will be used for analysis and comparison and as a basis for future study. Since scribing encounters using different writing tasks are the basis of the data collection and will also be used to facilitate children's written expression, the scribing approach is both a study method and a treatment technique. The scribe will record the child's oral language and demonstrate to him how speech is transferred to script and collect the written language produced by the child as a corpus to define and analyze children's writing. Analysis will take two forms:

- 1) an individual study of each child's performance; and,
- 2) a comparative study using the subjects and a control group.

I. Data Collections

A. Time Limits

- 1) The study will run for a period of eight weeks.
- 2) The first week will be devoted to selecting appropriate subjects for close study.
- 3) These subjects will then be visited four times a week for the remaining seven weeks of the study by the researcher to collect samples of written work.

B. Sampling

- 1) A heterogeneous grade three class was selected.
- 2) Four children were chosen as subjects. Two children with low fluency were taken to work with the scribe. Two children who had fluent written language were placed in the control group.
- 3) Selection of subjects from the whole class was done on the basis of four written assignments to determine fluency with written language.
- 4) Fluency of language was analyzed by the following criteria:
 - a) Length - the total number of c.u. produced in half an hour
 - b) Unity - the story adheres to a topic and comes to a conclusion
 - c) Type - the number of ellisions in the text of the story to indicate egocentriaty in the instrument used in this study
 - d) Complexity-the story evidenced sentences of several types, as indicated on the instrument used in the study
- 5) Subjects -the study and control group were matched for age, sex, S.E.S. and in one case ethnic background, and similar work habits and interests.

These were named for identification;

Low fluency	S	S
Study Subjects	1	2
High fluency	S	S
Control Subjects	3	4

- 6) The initial selection was confirmed by the subjective judgement of the teacher as a test of the criteria to see if it reflected the general writing ability of the subjects.

C. The Study Group

- 1) Subjects were visited by a scribe for half an hour a day, three times a week for the purpose of producing a sample of writing.
- 2) Subjects were motivated and assisted by the scribe to produce a written sample. The scribing encounter was to be a pleasant, non-pressure situation where child was to enjoy the discussion of his ideas and feel satisfied with his written product.
- 3) Dictation of subjects ideas was taken on a portable typewriter to facilitate both writing and reading processes.
- 4) Subjects were included in a whole class session one day a week in which a written assignment was presented. This written product was produced independently after motivation.

D. The Control Group

- 1) The control subjects were included in the whole class writing assignment once a week.
- 2) The researcher assisted their written expression when required and allowed reasonable time for completion but tried to maintain the half-hour period.

- 3) Control subjects were not advised that their work was scrutinized or compared.

E. The Scribe

- 1) The scribe questioned the child to elicit his ideas. The original language of the child was respected but minor adjustments were suggested to help him transfer speech to script.
- 2) The scribe engaged the child in conversation before, during and after the writing to help him clarify his ideas and participated with interest and appreciation in the writing.
- 3) The scribe directed the child in matters of spelling, punctuation, and syntax during the independent writing as briefly as possible and without teaching a lesson.
- 4) An anecdotal record of behaviours and observation during each encounter provided data about the scribing role.
- 5) Children were not told that they are being studied. They were told that the scribe wants a collection of stories.

F. Procedures

Collection of written samples for seven weeks by scribe who types child's story.

- 1) One visit per week.
Stimulus for written expression through picture, object or discussion. Resulting story is to be child's own expression.
- 2) One visit per week.
A fairy tale will be read or told as a stimulus for dramatization resulting in written expression. The resulting story will resemble the fairy tale.
- 3) One visit per week.
Elicitation of personal experiences will be used as a stimulus for written language. The format is the child's choice.

- 4) One visit per week.
Presentation of a short story or passage for children to become aware of the style and vocabulary. Resulting written expression will be modelled on the passage.

II. Data Analyses

A. Individual

- 1) The corpus of written language collected from each was examined using trends in fluency, coherence and complexity during the seven weeks.
- 2) Observations about comparative ease of composition and fluency of writing in the different forms was made, anecdotally and reactions to different motivation was examined.

B. Comparative

- 1) Between S_1 and S_2 .
Low fluency subjects were compared using the data compiled in the study to see if any difference occurred over the seven weeks in syntactic complexity, fluency and socialized language when a scribe assisted.
- 2) Between S_3 and S_4 .
High fluency subjects were compared using the data tabulated during study to see if any difference occurred over the seven weeks in syntactic complexity, fluency and socialized language when scribe did not assist with the written expression.
- 3) Between S_1 and S_3 .
High and low fluency subjects were compared using the data compiled in tables to see the relative change in syntactic complexity, fluency or length and socialized language when a scribe assists.
- 4) Between S_2 and S_4 .
High and low fluency subjects were compared to see the relative growth without a scribe.

- 5) Between sample and control groups.
Observations about written fluency at this level were made by comparing study and control groups using anecdotal records of motivational difference.

C. Verification

To ensure objectivity of data analysis, tabulation was done separately by the scribe and an assistant researcher and compared.

III. Instrumentation

A. The Corpus

The corpus of written language will be analyzed with the following instruments in Appendix II.

- 1) Record of fluency - total communication units will be plotted on a graph as the basis for comparison of fluency.
- 2) (a) Summary of syntactic complexity (Evanechko, Armstrong and Ollila) - a weekly record will be kept for each subject on types of structure used in the C.U.'s
 - (b) Comparative table - progress of subjects will be presented on weekly basis in the table.
- 3) Anecdotal record - motivation for each encounter and subjective observations of pertinent details on subject responses will be recorded.
- 4) (a) Piagetian categories of speech.
Percentage of egocentric and socialized language was established at the beginning. Findings are reported in Appendix III.
 - (b) Written Counterparts of Piagetian Categories of Language - each sample of the child's writing will be analyzed to assign communication units to these categories as Piaget did with speech.
 - (c) A cumulative graph - results will be plotted for duration of study to record the percentage of egocentric language, calculated by the formula:

$$\% \text{ E.L.} = 100 - \% \text{ S.L.}$$

B. The Calculations

The formula, developed in separate stages, is:

Step 1

$$\% \text{ Socialized Language} = \frac{\text{S.L.c.u.'s} \times 100}{\text{total c.u.'s}}$$

Step 2: Where:

$$\text{S.L.c.u.'s} = \text{Total c.u.'s} - \left[\text{E.L.c.u.'s} + H \right]$$

Step 3: Where:

$$H = \frac{\text{E.L.c.u.'s}}{\text{Total c.u.'s} + \xi}$$

Where ξ is the sum of the ellisions.

Step 4: Thus

$$\% \text{ S.L.} = \frac{\text{Total c.u.'s} - \left[\text{E.L.C.u.'s} + \frac{\text{E.L.}}{\text{Total c.u.} + \xi} \right]}{\text{Total c.u.}} \times 100$$

IV. Limitations

A. Generalizability

- 1) This is an ontogenic study. The small sample is not necessarily representative of the population but it may be possible to define the relative difficulty in acquiring better written skills with or without a scribe.

- 2) The findings of the study are specific to the subjects used. To generalize results the instruments would need to be used with random sampling of different populations. Research would be necessary at several ability levels to tabulate and compare results.
- 3) Progress of subjects during the study may be attributable to increased opportunity to write, as much as to the use of a scribe. However, the use of the scribe is also seen as a way to facilitate volume of writing and therefore, this does not alter the psycholinguistic generalizations.

B. Sampling

- 1) Children chosen are categorized as high fluency or low fluency in written language on the basis of four samples of writing collected over a one week period, but this fluency may depend on interest and motivation. Observations checked with the subjective appraisals of the classroom teacher serve as judgement of subject's suitability.
- 2) The results of a psycholinguistic approach to written acquisition may be more evident in a first grade classroom where strategies for written communication are in the formative stages. However, the intensity of this study may produce growth in written skills.
- 3) It was assumed by the researcher that grade three students were more able to handle the volume of written work and whatever time demands the study makes in addition to classroom activities.

C. Length

- 1) Eight weeks is a limited time to effect significant progress but any growth occurring is more likely to be attributable to training than maturation.
- 2) A longitudinal study would be productive of more growth or development. Generalizations of child's writing behaviour would be more accurate with increased data but this study is concerned with observing the child's initial reactions to this method to decide if further study would be a profitable research undertaking.

D. Measurement

- 1) The instruments have the capacity to measure some of the output of written language but cannot presume to accurately record the psychological and neurological activity producing thought or language.
- 2) The assumptions about the similarities between Piagetian categories of language and written production are only theoretical. In this study the same categories are used in the measurement as a useful way to explain progress.
- 3) The tabulation of data, that is, the measurement of length, complexity and type of written language, will be done by both scribe and researcher to reduce the subjective aspect of language categorization.

E. Variability

- 1) The results may be distorted by the interview techniques used by the scribe. Since this is unavoidable, the scribe attempted to assist the children with the writing task by redirection questions and not by suggesting directions. However, as personal variables in daily rapport and questioning skills are unavoidable, the product may be affected.
- 2) During the writing, the scribe was to retain the oral language of the child but direction that helped him master written form was permitted.
- 3) There is no desirable way to control the conversation or communication of children, therefore, individual differences, such as personality, daily health and emotional state of the subjects also distorted comparative data.

CHAPTER FOUR

FINDINGS

This study was designed to examine children's production of written language from an individual, clinical point of view so that close observation of the subjects could be made. The purpose of the study was to collect from the subjects a corpus of written language, under controlled conditions, over a short period of time to see if there were indications that the control conditions produced a change in the written product of the subjects. Since the data was collected from two subjects who were compared with a control group of two there was no intention of making statistical generalizations on such a small sample.

The intent of the study was to make individual and comparative records to discover any trends in the Type, Quantity or Quality of language used in writing. The conditions were described as a "scribing encounter" in which the language of the child was transcribed by the researcher who helped the child to clarify his thought and communicate his ideas orally but did not redirect the child's writing. The expected outcome was that the child, assisted in this manner with the mechanics of writing and the direction of thought, would be able to increase the quantity and

complexity of language used in writing. This prediction was made on the basis of a psycholinguistic theory of written language acquisition. If exposure to, and use of language forms develops children's competence with language, it ultimately affects their performance, because of the system of generalizations they are able to build; it is hypothesized that this process also occurs for writing.

Procedures were developed for the scribing researcher to spend half an hour a day:

- to motivate the subjects on a topic of interest;
- to take the dictation from the subject's oral language;
- to share the dictated story as it was reread by the subject.

The results of these scribing encounters were coded and recorded for seven weeks and then analyzed by instruments that focused on:

- 1) the overall length and average length of C-unit;
- 2) the syntactic complexity of structures; and,
- 3) the amount of egocentric and socialized language.

A comparison was made once a week between these dictated products and written samples produced by the child himself to see if the length of the C-unit, the degree of syntactic complexity or the percentage of egocentric language differed. To compare the changes that were observed in the writing of the subject with a group who had not had the assistance of a scribe, two children were used as a control group to see if they changed in

the seven week interval in:

- type of language used;
- amount of language produced; and,
- degree of syntactic complexity.

The results of the study are presented under the headings:

- 1) Quantity of Language Used by Subjects;
- 2) Complexity of Syntax Used by Subjects;
- 3) Type of Language Used by Subjects;
- 4) Motivation of Language Used With Subjects; and,
- 5) Individual and Comparative Analysis.

Synopsis of findings and calculations of written language of:

S₁

S₂

S₃

S₄

for seven weeks.

Information included:

Tables - Length of Communication Units;

Analysis of Syntactic Complexity;

Graphs of Egocentric Language; and,

Weekly Record Sheets and Samples of Stories -
Appendix II

These measures were devised to systematize observation of the subjective act of writing and therefore are only partially indicative of the process of learning to be literate. The data was collected so that the examples of children's work could be examined to see if it could provide answers to the questions about literacy asked at the beginning of the study.

These are:

- 1) Is fluency and control of written language similar to fluency and control of oral communication?

Apparently, from observation of the samples of work and an understanding of how the samples were produced, there was a close connection between the child's oral language and what he could produce either with the scribe or independently, and that the complexity and coherence of utterances was similar. This is a conclusion supported from the analysis of the data in the tables showing an increase in the length of C-units. Both subjects showed an increase of 1.7 during the time of the study which was paralleled by their ability to talk more easily with the scribe as the story was developed. This, undoubtedly, had much to do with familiarity and ease in the situation necessary for creative language work. The scribe provided the security and encouragement necessary for an increase of fluency and control in both oral and written messages.

- 2) Is fluency and control of written language increased when the writing is done as an extension of an oral message?

An increase in quantity, complexity and coherence of the written stories of both subjects is apparent in the measures used. This would be explained in terms of the study as the result of the interaction with the scribe who could prepare subject to coherently express his ideas in writing by giving him an opportunity to compose aloud first. This allows the scribe to give direction and feedback while the written message is being composed. As the data was collected, the samples of children's work were examined for any correspondence between the oral output and the written result. Each of the conversations with the scribe resulted in a piece of written work. These compositions were analyzed as indications of the child's degree of socialization. Their control and fluency while composing for writing was therefore partially observable and thus made it possible to see how much direction a child needed before he could express his ideas on paper, the type of response in writing. How his ideas fit together was dependent, at least in oral work, on the degree of interest and involvement in the topic. The best stories in term of the study were those that were a communique between researcher and child.

- 3) Is written fluency at the early stage more dependent on control of the language conventions or on the creation of ideas to communicate?

During the study, working closely with the two subjects made it possible to hypothesize about their approach to writing and observe

their difficulties. There seemed to be, especially in subject 1, a simplification of language to phrases that could be written so there would be less difficulty in putting it in writing. This seemed to be a natural way of handling the "convention of language" such as easier words to spell and shorter sentences. However, the most apparent difficulty was in creating a body of related ideas from which to select those best adapted to the written message. If the scribe could "bridge ideas" or help the subject keep on the track the organization of ideas was more coherent and interesting. This would indicate that children learning to write need to learn control and direction of the thought process and adopt a socialized point of view so that they can create and organize a written message. They will then be ready for help in mastering the convention. If they are directed to focus on the "conventions" they are easily sidetracked and become less coherent. The table on complexity shows that as the quantity of writing increases so does use of more complex structures. Although no statement can be made about cause and effect in the data, there is obviously a correlation.

- 4) Is the regression in fluency and control of language in the early stages of written composition due to difficulties inherent in the written medium or to the child's difficulty in organizing thought?

Since writing with the subjects of the study required the researcher to analyze the child's mental "set" to writing, it was observed that both subjects had difficulty with the abstract quality of writing. They were dealing with patterns of thought and needed to have some way

of retaining ideas till they could be processed. Often what was said was forgotten as they tried to repress their ideas. They noticed themselves that they had to have some method of remembering what they had been told. S₂ took to scribbling words to remind himself of an idea. They both began observing closely the process of print through the typing example and wanted to spell words as they were being written. As they wrote for themselves they seemed to pay less attention to neatness and spelling as the study progressed and they were able to produce more. Thus the tables indicate a higher word count. This was observed in the study as an interest in getting the idea down so it would not be lost. Obviously, the mechanics slowed the children down to some extent but as they became involved with the topic less time was spent on the painstaking printing expected for a high standard of written work and more effort was put into making the ideas fit. Often a re-reading of the sentence made them want to change the expression. S₂ became quite impressed with his own stories as being vehicles for ideas. The rocket story (3:3) in the appendix really appealed to him and wanted it just right because he realized the words were his own idea.

- 5) Can children learn the complex linguistic information needed to write with fluency and control through a method which synthesizes form and content?

The psycholinguistic focus of this study is to find a way to help children learn to write as naturally as they learn to speak. From the scribing encounters it was apparent that for this they needed a model and they needed much assistance but as they saw their

own language being transcribed they were helped to learn much of the information they needed to be independent. It seemed a less onerous task to compose aloud but they remained interested as their stories appeared at the typewriter and were quick to correct any errors or omissions. This required "tracking" or remembering their thoughts which led to a higher percentage of socialized language as the study progressed and they were able to maintain the length and complexity of the written work when they wrote independently. This would indicate that synthesis of learning about the written code was taking place.

These are general answers to the questions posed at the beginning of the study. Further comment under the headings of Quantity, Complexity and Type will describe specific interpretation of the data.

I. Findings On Children's Writing

A. Quantity

S₁ made the most gain in quantity of language used, but her output at first in both oral and written language was very limited; C-units tended to be short with much repetition of style and very little language was spontaneous. By the end of the study she was writing stories of several pages and offering much more oral language in the scribing encounter. It was noticeable that she began to play with the language and see the possibilities for making longer C-units.

S₂ was erratic throughout the study - at times his written output was very lengthy and at others he was not interested in the task of writing. It became apparent in working with him that he needed help in directly thinking or he quickly ran out of ideas. When he worked with a scribe his motivation and enthusiasm rose; when he was faced with the task independently it depended on his mood and involvement with the topic. Under discussion of the stories the motivational techniques which produced the longest stories were examined. It was found to be very beneficial to have a planning session before writing. Graphs present the total length of stories (in c.u.'s) on a daily base to be analyzed comparatively. The chart which tabulates average length of C-unit under the complexity analysis indicates the progression during the study.

TABLE VII
RECORD OF COMMUNICATION UNITS PER STORY

Week 1					Week 2				
Story	1	2	3	4	Story	1	2	3	4
S ₁	2	8	8	10		16	20	5	9
S ₂	4	3	4	13		23	12	7	6
S ₃			11						9
S ₄			27						10
Week 3					Week 4				
S ₁	5	13	8	10		12	11	12	11
S ₂	8	19	21	7		10	11	7	18
S ₃				8				12	
S ₄				17				19	
Week 5					Week 6				
S ₁	13	14	10	10		9	12	24	18
S ₂	16	4	8	8		12	19	25	14
S ₃		15						14	
S ₄		14						24	
Week 7									
S ₁	15	16	16	15	S ₁	- Shilpa			
S ₂	12	13	27	12	S ₂	- Kevin			
S ₃				18	S ₃	- Roopa			
S ₄				11	S ₄	- Warren			

B. Complexity

It was important to ascertain if the C-units the subjects composed both in dictation and in independent writing changed in complexity. These are presented in table form. It was found that S₁ made very observable improvement in using descriptive language and combining sentence elements from the beginning of the study. She perhaps improved because of the opportunity to use oral language, her increased confidence, the attention of the scribe or greater familiarity with English but she did attempt much more complex expression as the study progressed and there was a transfer to her own writing that made her able to put her own ideas into a written form, which she had been unable to handle at the beginning. S₂ also showed a wide range of word usage and more complex structures but characteristically this was erratic. He regressed frequently to run-on sentences and simple sentences in his own writing, although in the scribing encounter he often used examples of complex syntax both orally and for dictation and showed a knowledge of how language works that supports the assumption that his basic competence includes complex language forms that he did not feel the need to use in his written language. Data is compiled from Instrument 2, "Summary of of Syntactic Complexity" (Evans, Armstrong and Ollila).

It is interesting that the two subjects who were given scribing assistance showed an increase of average number of words per c.u. that exceeded the increase of subjects in the control group. S_1 went from 8.3 to 10 words, while S_3 who was matched in S.E.S. to S_1 but began as a more fluent writer, increased only .9 from the original 8 word average. S_2 , as compared to S_4 , his counterpart in the control group, made an increase of 1.7 over the 1.1 of S_4 . As far as types of structure S_1 began with no complex structures and by the end of the study was using more 2 count structures. S_2 showed a remarkable increase from 2 to 19, of the two count structures while both members of the control group had very few of the more complex patterns.

It is worthy of note that the total word count for the control group of S_3 and S_4 is based on only one story per week which was used to compare with the independent writing of the subjects in the group under study.

Significant to the observation is that the overall number of c.u.'s increased because this indicates that subjects were able to selectively use more information as they became more fluent. S_1 shows a tally of 62 c.u.'s for week 7 as compared to only 28 in week one. This was also true for S_2 who went from 24 to 64 c.u.'s.

At the end of the study both were much more confident that they could express their ideas in the written mode and were more anxious to communicate their ideas. They had several ways of approaching writing tasks and wasted less time getting started than

It is interesting that the two subjects who were given scribing assistance showed an increase of average number of words per c.u. that exceeded the increase of subjects in the control group. S₁ went from 8.3 to 10 words, while S₃ who was matched in S.E.S. to S₁ but began as a more fluent writer, increased only .9 from the original 8 word average. S₂, as compared to S₄, his counterpart in the control group, made an increase of 1.7 over the 1.1 of S₄. As far as types of structure S₁ began with no complex structures and by the end of the study was using more 2 count structures. S₂ showed a remarkable increase from 2 to 19, of the two count structures while both members of the control group had very few of the more complex patterns.

It is worthy of note that the total word count for the control group of S₃ and S₄ is based on only one story per week which was used to compare with the independent writing of the subjects in the group under study.

Significant to the observation is that the overall number of c.u.'s increased because this indicates that subjects were able to selectively use more information as they became more fluent. S₁ shows a tally of 62 c.u.'s for week 7 as compared to only 28 in week one. This was also true for S₂ who went from 24 to 64 c.u.'s.

At the end of the study both were much more confident that they could express their ideas in the written mode and were more anxious to communicate their ideas. They had several ways of approaching writing tasks and wasted less time getting started than

they had at the beginning.

Summarily, they felt the scribe was helping them write and they were willing to try to express their ideas.

C. Type

One of the premises of the study was that the child changed the type of language as his purposes for language use altered. The types of language which were under consideration here were Piaget's categories of egocentric and socialized language because the study intended to show that egocentric language use also occurs in writing. The child decreases the percentage of egocentric language when he adapts his communication to another's needs. The table - I.1 assigning all communication units to egocentric or socialized categories was used to develop Graph I - IV which demonstrates the subject's uses of socialized language in writing. This was done weekly because of the small number of c.u.'s produced daily. The quantitative representation of egocentric language would exceed the tally of communication units because of the presence of elisions or gaps in the development of the idea and allusive or syncretistic statements where expansion or clarification is necessary for socialized communication. These elisions are an indication of the child's stage of language development and decrease as he becomes aware of the need to adapt his communication to the needs of a receiver. The language the child would have used in place of the elisions may be egocentric or socialized. The percentage of egocentric language appearing in the child's writing was corrected to account for the phenomenon of the elision by a formula.

Calculating a co-efficient to represent the relationship of the elisions to the written expression of the child required a comparison of the amount of egocentric language to the total expression, allowing for the elisions. The co-efficient, calculated by a method similar to Piaget's speech, was termed H . The number of elisions $\{$ was taken as a missing portion of the total c.u.'s and they were therefore a part of the relationship of the total c.u.'s to the total egocentric c.u.'s. The value of H was directly related to the percentage of egocentric language in the child's writing and therefore affected the amount termed socialized language inversely. This value of H did not vary greatly but decreased as less egocentric language was used. The preliminary data analysis shows there is some reason to believe that, with statistical study, a table could be developed to standardize the value of H for the writing of children.

The formula, developed in separate stages by the researcher is:

Step 1

$$\% \text{ Socialized Language} = \frac{\text{S.L.c.u.}}{\text{Total c.u.}} \times 100$$

Step 2: Where

$$\text{S.L.c.u.} = \text{Total c.u.} - \left[\text{E.L.c.u.} + H \right]$$

Step 3: Where

$$H = \frac{E.L.}{\text{Total c.u.} + \xi}$$

If ξ is the sum of the elisions.

Step 4: Thus

$$\% \text{ S.L.} = \frac{\text{Total c.u.} - E.L. + \left[\frac{E.L.}{\text{Total c.u.} + \xi} \right]}{\text{Total c.u.}} \times 100$$

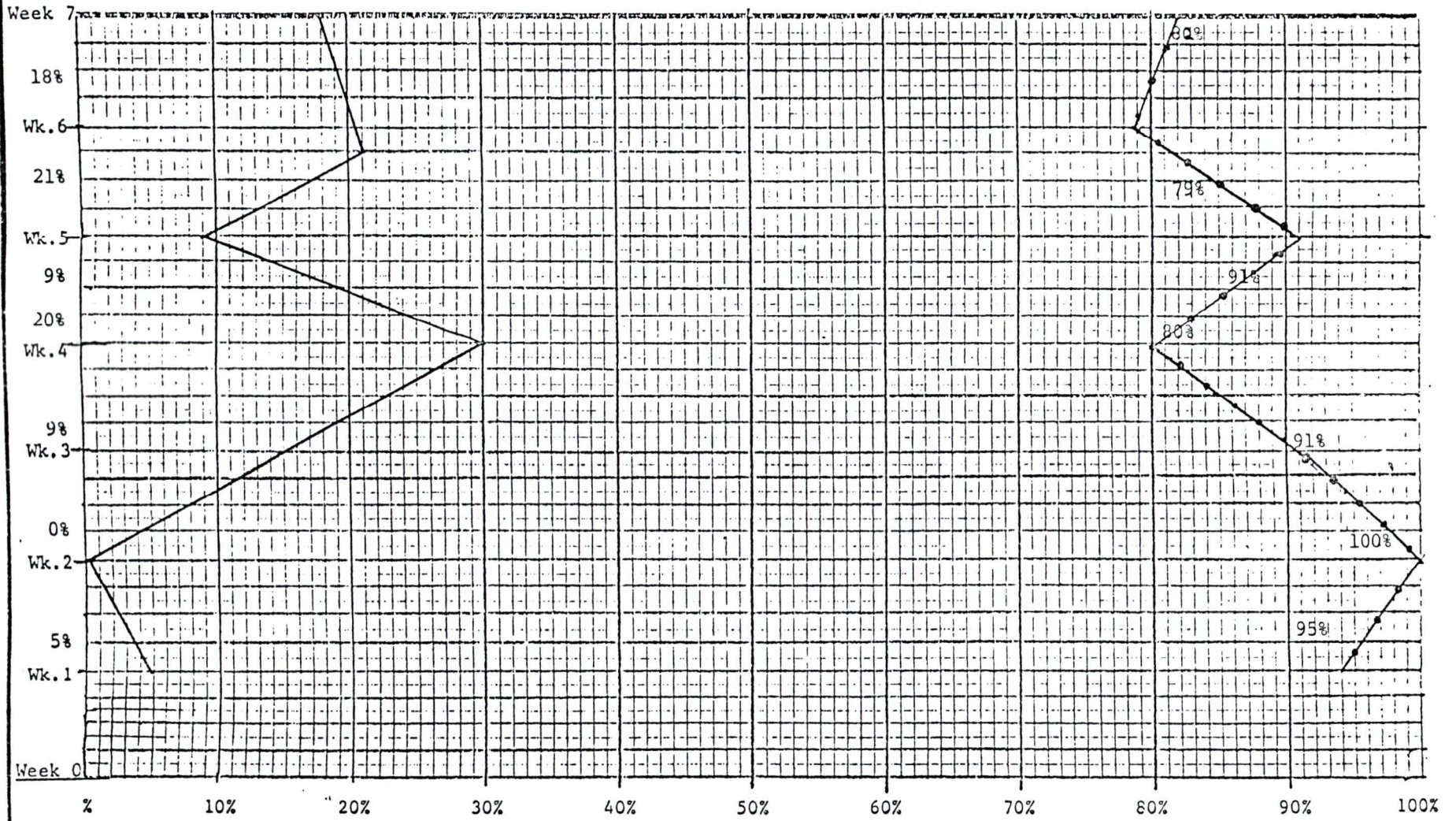
This was validated by two graduate assistants who tallied the written c.u.'s and arrived at a value for S.L. that was consistent.

The graphs were developed from this data for the subjects of the study, showing that as children were helped by the scribe to reduce the elliptical reference, the syncretistic thinking and the vague allusions, the amount of socialized language increased. It indicated, from the reduction of H in the independent written products, that they were able to make progress when their purposes of communication were clear or important to them. S_1 made very noticeable gains in her use of socialized communication in writing but S_2 was found to vary greatly. In a larger study the significance of this trend toward

socialized language and reduction of egocentric language forms
could be made statistical.

Comparison of Egocentric and Socialized Language
in Written Expression

Key: E.L. _____
S.L. -o-o-o-

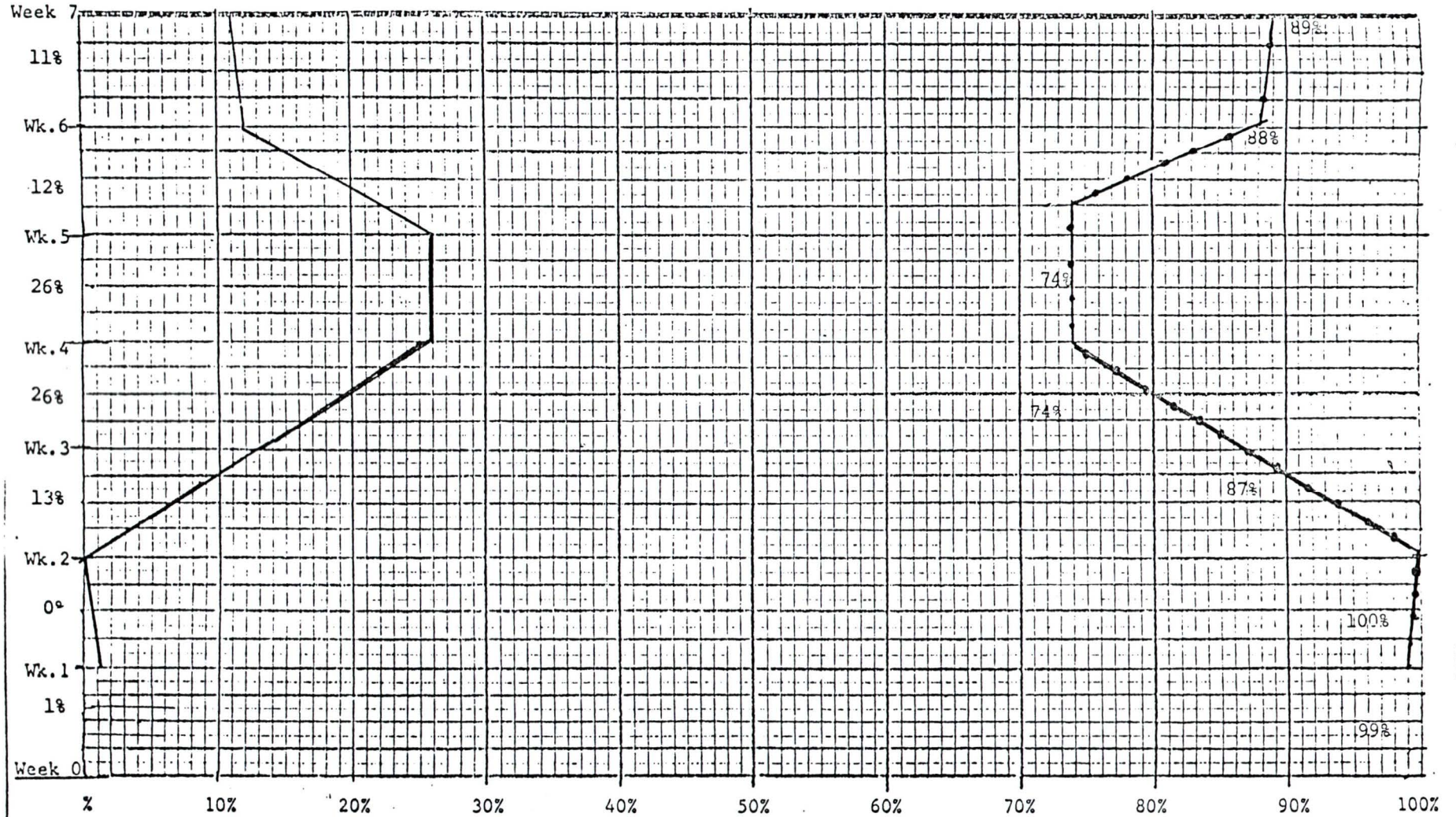


Name Shilpa S. Graph I

Comparison of Egocentric and Socialized Language
in Written Expression

Key: E.L. _____

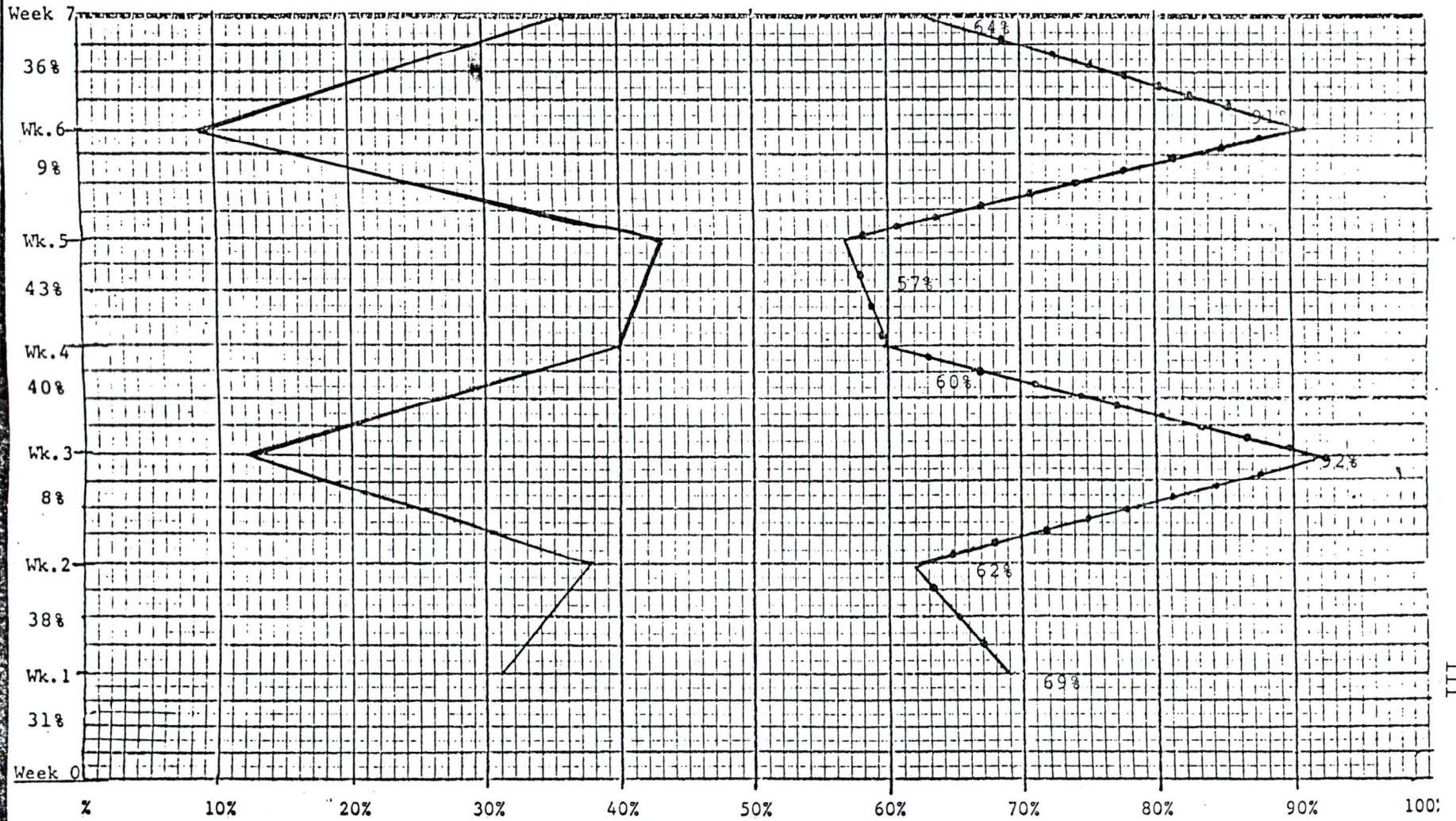
S.L. - . - . - .



Name KEVIN S. Graph II

Comparison of Egocentric and Socialized Language
in Written Expression

Key: E.L. _____
S.L. -o-o-o-

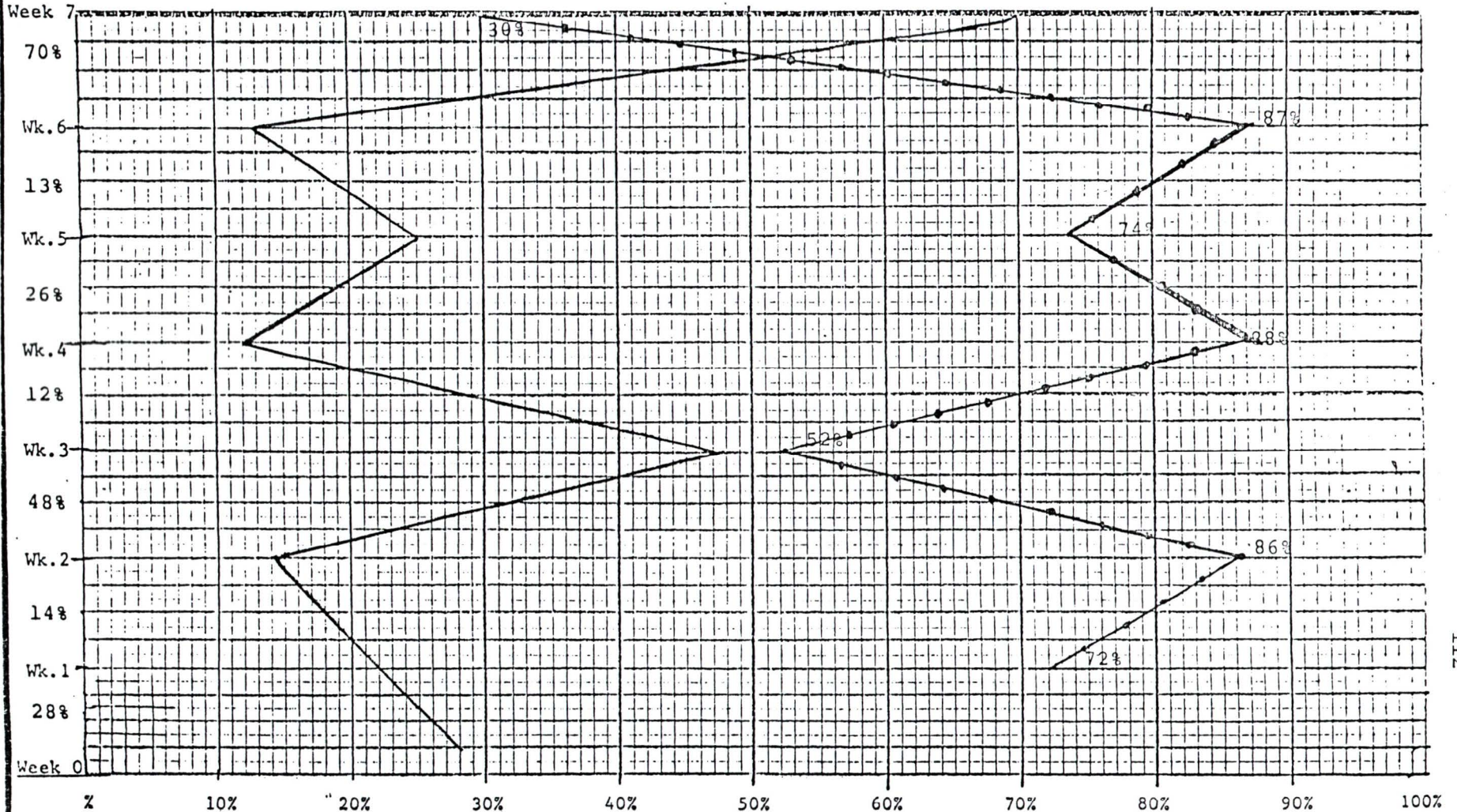


Name Roopa S₃ Graph III

III

Comparison of Egocentric and Socialized Language
in Written Expression

Key: E.L. _____
S.L. - - - - -



Name Warren S₄ Graph IV

Examination of the data shows there was a difference in length of communication units and that there was a decrease in egocentric types of c.u.'s, but analysis of the data does not give enough information about the subjects' approach to the problems of writing. As the data was collected it was possible to note certain tendencies in each subject's approach which were apparently characteristic and related to the personality and stage of language development of the subject. The way he expressed himself, the things that captured his attention, and stimulated greater production and satisfaction in writing, were dependent on subjective factors discussed in Appendix I.

For example, S₁ used little imagination and could not "picture" scenes freely. She needed much prompting with questions about details to elicit any story. Her early stories are nearly incoherent with a high rate - 95%, of egocentric language. This is evidenced in the examples from Week 3 included in the Appendix I. She uses a statement in her first story that indicates her awareness of her limitation. She says, "That's all I have to tell you." She needed the constant help of the scribe to connect ideas. This tendency to use a high percentage of ego-centric language was detected in writing through the many elliptical statements, that is, there were many gaps in the story. Through interaction with the researcher and S₂, confidence in her language ability grew and she was willing to make longer statements and play with words and ideas so by the end of the study had nearly tripled her output and reduced the egocentric language to 82%.

S₂ used egocentric language differently. He became engrossed in an idea and forgot what he had said before. He lost track of his thinking and needed constant reminders to fill in the details. He was able to do this quite well with help and he reduced the amount of egocentric language from 99% to 89%.

Both members of the control group used more socialized or coherent language throughout the study and made relatively little change. They had not used many elliptical statements and seemed able to keep the thread of communication going in oral and written work. These subjects were therefore more "literate", than those under study in the scribing group, because they were able to express themselves with more fluency and control in a way that could be communicated to others.

The use of ellipses, then, is taken in this study to be one of the important indications that a child will need assistance before he can develop literacy. The number of ellipses indicates an inability to handle the written code for meaning. The best method to develop coherence of thought necessary for written expression is in the presence of another who can question the child about his meaning till he learns to hold the thought for himself without losing track while he writes. To identify himself as the reader who must also be able to follow, helps the child to avoid the ellipses of the egocentric point of view, then he can externalize his thoughts so they can be shared.

Egocentrism as shown on the graphs is directly related to the number of ellipses or Σ . A high Σ is taken as an indication that the child cannot yet process enough information to make his message coherent. This was the justification for a scribing technique to help children bridge the gap to literacy.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

I. Summary

The nature of language and the nature of language learning indicate there must be a dynamic interrelation of the sources of language and the conditions of its use. The connection between purpose and sources may be summarized by the parallel list below: The purpose of language for expression, communication and thought is interdependent with the sources of language learning which is predicated on action, reaction and interaction, so the two lists can be joined by reciprocal ties.

LANGUAGE PURPOSES	LANGUAGE SOURCES
Personal	Action
Social	Reaction (Experience)
Conceptual	Interaction

The child's power of conceptualization and his skill in communication is developed by an integration of information about language and a reciprocity between himself and his environment. For him to learn the processes of communication, he must adapt sources to his own purposes.

Psycholinguistics is concerned with language as a process. Speech and writing are productive processes of language used for similar purposes and having the same sources, so a study of the concepts of psycholinguistics can help explain the nature of written language. The nature of written language and the nature of literacy suggest that a performance/competence model can be theorized for both forms of expression, that is, that the child knows much more about the written language than he uses. To develop literacy, the child must be able to utilize more of the knowledge in his performance of the writing act.

Literacy is developed on a natural language base. The analogies between writing and speech suggest that an approach to instruction for writing using oracy as a base. Also, it seems axiomatic that learning to write is easiest for the child in a situation that is psychologically supportive and that can provide stimulation of his ideas so that he can learn to produce a written message by referring to what he would say aloud. This requires much talk to prepare him for the encoding of a written communique. This study recommends that the child be assisted by a scribe who can help him with the symbolization of his ideas. This initiation to literacy is seen as a natural development of the child's speech to a new symbol system.

It has been theorized for purposes of this study that learning to write is a psycholinguistic task, involving the coding of a message in a learned symbol system for purposes of communication. The psycholinguistic models for acquisition of speech have been used to explain

both performance and competence in writing. The child learning to write needs the same support from other language users as the child learning to speak. The difficulty of explaining to a young child what writers do to produce a message is much more difficult than showing him and letting him learn by the examples of written work he produces with assistance.

The study was a means of compiling some data about the process of the scribing method of teaching literacy, and for purposes of this research showed that children were writing more, writing more easily and writing more complex messages after they were assisted by the scribe. The conclusions show the reasons for a psycholinguistic basis to instruction for literacy in the primary grades.

II. A. CONCLUSIONS ON THE RELATION OF SPEECH TO LITERACY

In the study the analogies and dissimilarity between speech and writing emphasized psycholinguistic principles. Table IX is a compilation of ideas which have been examined.

TABLE IX

ANALOGIES

Speaking and writing are psycholinguistic activities that:

- 1) mediate meaning through a symbol system;
- 2) conform to conventions of phonology, represented by the symbols;
- 3) have a similarity of function in communication;
- 4) are expressions of meaning by an individual;
- 5) are the evidence of the synthesis of ideas which activates the mechanisms for language production;
- 6) rely on the functions of Short Term Memory and Long Term Memory for processing information;
- 7) depend on past experience for semantic knowledge;
- 8) have a deep structure that is different from the surface structure;
- 9) utilize rules of syntax that have been acquired;
- 10) are learned by a synthesis of form rather than by analysis of structure;
- 11) require a large corpus of language to develop necessary generalizations about form;
- 12) use feedback on the errors to refine a system of generalization;
- 13) use symbols connectedly and not as individual units;
- 14) process meaning as a flow;

- 15) depend on an inner motivation for conceptual organization; and,
- 16) have a competence that exceeds performance.

DISSIMILARITIES

- 1) speech is learned naturally and spontaneously; learning to write is a decisive or arbitrary act;
- 2) speech is a primary linguistic activity; writing is a further application of linguistic knowledge;
- 3) speech is a spontaneous activity; writing is contrived, therefore, a time lag in production affects meaning;
- 4) spoken form differs from written form; therefore, different perceptions are necessary;
- 5) linguistic units of speech are phonemic; in writing they are alphabetic or graphemic;
- 6) speech sounds are a complex code; print is a more simple cipher symbol reduction of the speech code;
- 7) symbols in writing can be perceived separately for analysis; in speech they are difficult to process separately.

B. GENERALIZATIONS ON THE STUDY

Language learning and logic are, indeed, related to literacy but the young child makes the relationship only if his experience with writing is wide enough to permit formulation of generalizations about both forms of language which are personally significant: this is the import of the psycholinguist theory, the child can learn for himself what would be very difficult to teach about language. He is able to process language and discern relationships provided he has enough "primary linguistic data", as McNeil calls the input, thus, an understanding of how children receive this data, which gives mastery

of language skill, is needed to enable educators to structure activities that lead to fluency and control. The psycholinguist's area of interest has been to discover how children progress to functional command over their language structure; it has been primary with speech and to some extent in reading but it can be extended to include acquisition of written language. Both Goodman and Smith stress the need for psycholinguists to try to explain the process: Smith says that the psycholinguist ". . . is concerned with how thoughts are generated and how they can be reproduced on paper"; he states, however, ". . . unfortunately, a great deal cannot be said about either topic, although much is waiting to be understood."¹¹³ This study, in a small way, has been concerned with understanding the process.

The assistance of a scribe who can directly and correctly give information about the symbols and patterns of language on an individual basis does, on the basis of the study's findings, facilitate the process of learning to write. The foundations for future fluency can in this way be established so that logical thought necessary for literacy can develop. Production of written language without close supervision and assistance was seen in this study to be very frustrating to the child who does not understand the generalizations necessary for writing, and, without proper feedback, he may adopt strategies which are incorrect or detrimental. At the formative stage of writing skills, as is true for acquisition of speech, the feedback the child receives about his performance is critical to his

organization of the structure of language and his construction of the feature lists which serve for recognition and production of language. As he extends his use of language in the next task of writing he needs to establish the parameters of the task, that is, he needs to understand what it is "to write", to transpose ideas from thought to paper. He must in some way define the paradigm which he will use to make language his own in both speech and writing. The intent of this study has been to show one way to assist children in the acquisition of written language by helping them understand the idea of writing. As the child sees written language produced which corresponds to his oral language and thought he discovers the relationship for himself and gains competence in this new area of language performance. Appendix II serves for comparison of assisted and independent writing.

It is a psycholinguistic assumption underlying this study that some competence must be gained before performance can occur; competence is gained by exposure, experimentation and feedback. This suggests that much assisted work precedes independent writing. Smith says writing becomes ". . . a futile exercise in confused exasperation" because children learning to write often make a regression to less fluent forms of language than they use in speech and therefore become confused and frustrated. This study, which was designed to make some recommendations on the reduction

of children's frustration in writing and suggest ways to have the child make sense out of his experiences with written language, seems to indicate that supportive help and models help the child produce more writing and more complex writing, with more attention to communication purposes.

It is significant that all language learning moves from fluency to control. In written skills we have expected a high degree of control over very complex linguistic data and often have censored the early fluency stage in which linguistic generalizations are made through error and appropriate feedback. This study offers a way to initiate the child into the conventions of written language that may help him use better strategies to gain fluency by permitting him to experiment with production of the written counterpart of speech. With the assistance of one who is skillful in writing, fluency can develop naturally. Even though this requires time and individual attention, it may be an effective and ultimately efficient way of teaching for literacy.

If it is true that language learning is an active involvement in the communication process, this study has implication for the kind of writing experiences appropriate for children in primary grades. Quoting Smith again, "Practise is the means by which all language skills are developed and tested, and practise must be on tasks that are easy . . . The best way to encourage writing, like the best way to develop reading, is to make the task easy!", or, at least comprehensible. The major significance of the study is the premise that learning to write is made easier by providing opportunities for the child to produce a large corpus

of written language with the assistance of a literate helper. This can in fact produce reasonable models of written work that will give him some satisfaction in expressing his ideas in the new medium. The findings seem to indicate that scribing does improve the quantity, complexity and socialization of a child's writing. This study has been concerned, basically, with the relationship of language, logic and literacy in terms of psycholinguistic and Piagetian research on child language, in an attempt to understand how children learn to write.

In working with S_1 and S_2 the types of motivations and nature of the writing task seemed to produce a variation in the proportion of egocentric language in the total communication units but the value of the co-efficient for egocentric language did not seem to change for each child until the total amount of egocentric language was reduced in their writing because of the use of more coherent and complex statements. S_1 was able to make this reduction more rapidly because she became familiar with English in use but S_2 was more prone to maintain the value of H because he found it difficult to socialize his language or to adapt his writing to the needs of a receiver without assistance.

The progress of each subject was explained by the degree of language socialization each child had achieved in writing.

S_2 was able to decrease the egocentricity of his writing when he was helped. H was used as an indicator of the degree of socialization

the child was capable of in writing, this was preferable to a raw score of the egocentric language c.u.'s because the writing act at all levels is high in egocentric language. Using the formula makes it possible to see how the writing act reflects the stage of language socialization.

Children's tendency to use ellipses furnished valuable information about their ability to convey thought in writing and their need for organizational help and oral language experience before writing. This could enable the teacher to match writing tasks and instruction to the young child on a sound Piagetian basis.

Results of the study reported under Findings (Appendix III) show:

PERCENTAGE OF EGOCENTRIC LANGUAGE IN CHILDREN'S WRITING

Age 6 - 7	83 %
Age 7 - 8	68.5 %

Indications of the pilot study were that there was a regression to less fluent or coherent forms of expression because egocentric language approximately doubled that recorded in the oral speech of the subjects. Further observation supported the higher expectation for egocentric language. On the basis of this observation some hypotheses were formed in regard to children's problems in becoming literate.

C. Hypotheses Of Causes Of Regression To Egocentric Language
In Early Writing

- 1) Early stages of writing are characterized by egocentric language and there is a regression from the fluency and control of speech because the child has not yet equated the two forms of language and therefore the content reflects the degree of organization of his thought and his competence is gained slowly.
- 2) Organization of thought requires a focus and a point of view which can be related to a receiver. The child's point of view is very egocentric and his intellectual egocentricism reappears whenever his organization is confused; therefore he cannot adapt his written message to a receiver until he learns to receive his own message as a reader.
- 3) Reflection is necessary to the creation and organization of written thought. The child's system of reference becomes confused when he must reflect and there is a regression to egocentric thought and expression because the ideas he generates cannot be spontaneously expressed, as they are in speech. Therefore, written fluency and control develops when the child can record thought.
- 4) In early stages of writing, the spontaneous expression of the child is interrupted by the delays and demands of transcription of thought to script. Therefore, the reappearance of egocentric style and form of language is due to the child's inability to retain his thoughts in verbal form while he solves the problems and handles the mechanics of writing - i.e. remembering words, deciphering spelling, holding pencil properly.
- 5) Script requires the child to process much new linguistic information and he will gain competence and fluency with the new form slowly. The early stages exhibit egocentric language because the child cannot synthesize form and content without much experience in the new medium.

These hypotheses are considered in terms of the study as the tentative answers to the questions formulated at the beginning of the study designed to examine literacy in the early grades. Although they are not conclusive they represent the opinions derived from a close observation of children's approach to writing and the results that

were obtained. As hypotheses, they incorporate both subjective and objective aspects of the study of young children's writing.

The evidence in the study is that children do use a higher percentage of egocentric language in early writing than they do in their speech. This is to be expected since writing does have an egocentric characteristic, however, the presence of many ellipses in the writing of young children can be seen as evidence of their problems in coherent message production. Without assistance they become unavoidably lost in their own thought process. This confusion is difficult for them to eliminate. The confusion is so basic to this stage of writing that, until they develop ways to "keep track" of their ideas, the ellipses will continue to appear as a sign of their particular stage of written language development. The ellipsis is seen in this study as a way of recognizing children who need help in developing written language. Analysis of the ellipses in children's writing is one of the few ways available to understand the child's ability to track, or retain, thought. Much study could be done on the ellipses as a way to identify and treat early difficulties with writing using graphs such as developed in the findings.

The hypotheses on the regression to egocentric language utilize a Piagetian principle operating in the child's cognitive structure. Behind the written line lies the child's idea - an inner intention of meaning. When he is able to process the meaning in suitable written symbols he succeeds in transforming his thought into a communication with the world. This requires him to become aware of the direction of

his ideas. Subjects under study had great difficulty in giving direction to their thought and keeping on course with their ideas. They had to learn to direct the written expression at someone; in the study it was the scribe who became the recipient until the scribe showed them how to use the rereading process to check direction. At this point they became much more able to direct their own thought; and ellipses were less in evidence.

Only when the children were ready to understand that their thought could be controlled, or, when they did not "lose track" of what they were talking about, could they improve on the coherence and completeness of their ideas. When they learn to focus on what thoughts they have to use can they select related and significant elements to reproduce in their written message.

This focus, that he must learn if he is to write, is similar to the kind of attention to the object that the young child, learning to hold things in memory even when it disappears from sight, must develop. Thought, when it is what Piaget called egocentric, is like the object that disappears from the child's memory when he is not attending directly to it - he "forgets" what he has seen or thought. So with early writing. It is difficult for the child to remember the flow of his thoughts - it is like an adult trying to remember a dream or the sequence and significance of all the images in a movie. In recounting it, much is left out, therefore, it is elliptical and incoherent, because it is mostly forgotten. As the child can focus on the sensation of thinking and realize that his ideas can be created

and controlled, he is able to make relationships that survive long enough as an idea to make it possible to express them in writing.

Speech is much closer than writing to being simultaneous with thought origins. Children in the study could create and express ideas more coherently aloud; it was in writing that there was a barrier to spontaneous expression. It would seem reasonable that the short term memory becomes so overloaded with information that cannot be spontaneously expressed in writing. To write, the children had to make thought "conscious", they could not rely on the short term memory if they needed to refer back to these ideas. The hypotheses about regression reflect the observation that children were not able to make thought conscious or lasting easily. This opinion is based, of course, on the external message production both oral and written but is correct by psycholinguistic principles.

The child's origin of ideas in speaking is barely conscious to him - he speaks often without "reflection" - a word used, really, for rerunning the same thought to examine it or "rethinking". This implies that he has learned to store or retain his ideas. In fact, unless the origins of ideas are known, he cannot retrace them or reverse the process to see what ideas he was thinking because they are almost lost in his subconscious process. This was seen to be true in the early part of the study. Children forgot so easily what they were thinking when they were asked to write it that they needed to "reflect" or rerun their ideas to see if they made sense.

This required the same kind of assistance to develop focus and continuity as the very young child needs to form a constant image of an object, for example, a rattle in his environment. The scribe helped the children form a communication with the environment so that the ideas exchanged could be re-examined. The way used in the study to overcome the regression to egocentric language was to help the subject's focus on the ellipses to fill in the information. When the child had "forgotten" he was helped to remember the thought and reflect on his ideas. This led to a better focus and more re-reading as the child realized he was able to "receive" his own message. Both subjects needed considerable help in keeping this focus, which is both intelligent and sensational. Thought is also a sensation which the children needed to learn to attend to, and as they perceived their own ideas they were able to communicate them more fully. This is the development Piaget discusses as the socialization of language in writing. This recording of language becomes a mere sophisticated, cognitive skill.

III. Implications For Teaching Literacy

A. Practicality of Method

It was apparent from the interaction with the subjects as well as from examination of the data, that the subjects of the study enjoyed and responded to the individual attention while trying to write.

In light of the theories of language acquisition discussed in this thesis, contact with a scribe would be beneficial for any child learning to

write; the scribe would help the child clarify thoughts, and assist him in the difficult mechanics of the early stages of writing, including spelling, grammar and the printing process, as well as provide encouragement to the child to produce a larger corpus of written language. However, the scribing method could be most profitable when there was a continuity in the type of experience used in this study. Generally speaking, it is difficult to provide enough of this scribing time with the child to develop the appropriate strategies for writing in the normal classroom. If there could be other encounters with a scribe other than the teacher the method would be more adapted to the needs of the primary classroom. It would be necessary to train parents, aids, older children or some volunteers in a programme so that each child in the early stages of learning to write could spend time almost daily with someone who could help him scribe his ideas. Anytime spent doing this type of programme is obviously teaching time well spent in terms of feedback to the child, but to be properly called a scribing method for teaching writing it would have to be much more intensive than the single teacher could effectively handle without help.

The most practical time to begin a programme of scribing encounters would be very early in the child's attempts to master the written code. Habits of writing and understanding of forms would be developed without frustration at that point. But scribing is useful at all stages and could even be used at intervals to assist children as they use more complex forms and ideas. This could be done fairly easily, even by a

single teacher in the classroom using a rotational system of interviews or, with volunteer help, it could be expanded to be used remedially to those who were not gaining fluency and control in written work. In effect, that is, what was done with the two subjects in this study. A remedial programme was provided for them so that the writing process could be demonstrated. Both subjects, before the study seemed to demonstrate a regression to more egocentric language or were unable to produce a large enough body of written language to become skillful. This programme, then, was a practical solution to their need for individual assistance and they were then observed as typical students needing help to learn to write.

B. Redefining The Writing Process

(i) Writing As Expression. Writing must be an opportunity to make sense using new symbols for ideas that can be expressed in speech. The assumptions about the nature of language used at the beginning of this study are also applicable to writing. How can writing be learned as:

- a) personal expression;
- b) communication; and
- c) a system of language governed by rules.

Sapir explains that language develops from ". . . the tendency to master reality, not by direct and ad hoc handling of that element, but by reduction of experience to a familiar form."¹¹⁵

The verbalism that Sapir postulates saturates experience is the source of all written expression. Therefore, what a child knows about the

world and about language are basic to transfer of sense to a page. If a child would not be likely to talk about a subject, it is not a reasonable attitude to expect him to write about it.¹¹⁶

Writing reflects the personality and the conceptual order of the child and depends on the prior existence of speech (even where it is the speech of others) for him to reduce his view of reality to language forms that are familiar, natural and expressive, therefore, talking should play a large role in a writing programme.

For the child to learn to write, expression must fill some subjective purpose. Feelings, thoughts, experiences must be clarified and ordered if they are to be articulated. This requires awareness and reflection. Britton sees written expression as using language in the role of a spectator, because one must distance from the immediate and express a subjective viewpoint. He says, "What we build with the help of language is not only a word picture, but a self picture,"¹¹⁷ because it develops from some type of introspection so that the spectator is free to attend to form of expression, ". . . to forms of and in the utterance; to linguistic forms, to the form of events and especially to the patterns and form of feeling."¹¹⁸ By implication, teaching a child to write requires the teacher to help in reduction of the child's reality to written form so he can examine it as a spectator. This is best done when teacher is a participant in the communication process, both in speech and writing.

(ii) Writing As Communication. "In my opinion writing is nothing more than a variety of speech which endures after it is spoken."¹¹⁹ Castiglione, a Renaissance courtier, recognizing the nature of written language to preserve communication, advises writers to seek precision and clarity in order to facilitate the reader's interpretation. The transfer of ideas to written form and the development of skills for adapting language to a new medium is important to both the courtier and the child learning to write. This requires much assistance before the child can clarify ideas and articulate them for a reader. He must first learn to think less egocentrically. The implication of this study is that he learns best with assistance of another person supervising the writing act.

The purpose of writing, at its simplest, is to communicate and therefore, presupposes a reader just as speech presupposes a hearer. Britton calls this presupposition "a sense of audience",¹²⁰ which will determine what is said and how it is said. He classifies children's writing in four main categories according to communicative purposes: self as audience, teacher as audience, a "known" audience, i.e. peers, and an unknown audience. The difference in writing style increases as the child's "sense of audience" becomes more specific. At first, the child is his own "audience" in writing, even though the teacher shares the message. The teacher must intuit meaning when clarity and precision are not in evidence. For a wider readership, the child

must write to be understood. Piaget indicates that this is a problem of socializing thought and language. Communicability of thought depends on the child's ability to make coherent statements and to present sufficient information so as to be understood by others.¹²¹ Teachers can use this knowledge to increase language socialization.

(iii) Structure In Writing. Psycholinguistic principles of language acquisition are useful in the analysis of the process of learning to write. They have been formulated to explain the child's development of fluency by control of and obedience to rules that have been induced. Further, the assumption has been made that the system of rules that structure speech must be apprehended from a large sample of language.¹²² The linguistic rules that the child learns permit him to engage in communication without limiting his expression to those utterances he has already heard. This theory of language learning, that competence precedes performance, assumes that the child must know more about linguistic principles than he uses in his speech encounters. As David McNeill puts it, a child learns the structure of his language by a psycholinguistic process of "guided invention".¹²³ Rules of correspondence between speech and script must also be perceived or "invented" although they are not necessarily conscious formulations. Language learning is a complex process developed by experimental knowledge,

memory and linguistic abstraction about structure. These elements also provide the child with a basis for learning the structure of written language.

Written language is also governed by rules which the child obeys but perhaps cannot articulate. Certain phonological, syntactic and semantic information must be learned or made apparent to the child before he can produce written composition. For example, the concept of a "word" both as a visual representation and a semantic entity must be developed. Mastery of the written structure requires the child to think more logically about language itself, if he is to control the process. Mattingly calls this, growth of "linguistic awareness".¹²⁴ Teachers can encourage this.

It is a psycholinguistic assumption that children can process language and learn structure through their own inherent devices.¹²⁵ Learning to speak and learning to write present very different problems to the child, but many of the same strategies apply. "Guided invention" may describe one way he becomes literate. Guidance is given in the process by appropriate instruction and exposure to models. However, as with speech, a learner is initially better at synthesis than analysis. That is, he can use language better than he can explain it. In Genesis of Language, George Miller stated that language behaviour shows: 1) progressive refinement; 2) increasing complexity; 3) improved suitability to the receiver;

4) and greater flexibility and adaptability. Learning to write is a new psycholinguistic task and these same developments will occur as the child gains control of the form,¹²⁶ through production of a large corpus of writing.

Instruction alone cannot provide all the particular information he needs to express himself in writing. It must, instead, help him to refine his techniques for perceiving the relationship of writing and speech and assist him to organize and present his ideas in the new form. Nurturing the growth of written language skills is not teaching rules for satisfactory performance. It begins with understanding the nature of the problems inherent in gaining linguistic competence. Linguistic competence is basic. In other words, writing grows out of the ability to speak; written performance can only derive from the competence the child has in language, therefore, children learning to write need to be helped to understand the ability of their language to communicate personal meaning. Instruction should provide the opportunity to model language forms, to extrapolate rules from experience, to experiment with structure and to practise the skills. The method most suited to developing appropriate generalizations and correcting inconsistencies is related to what is known about acquisition of language; abundant examples, motivated practise and controlled feedback help the child develop performance that draws on basic competence with the written forms. This is also a psycholinguistically sound approach for learning to write.

Therefore, the study concludes that a scribe, using this method, can facilitate the child's acquisition of literacy and make him effective in the techniques of written language by helping him understand how his ideas are converted from speech to the written code. The data as explained in this thesis, support the view that learning to write in the primary grades is a psycholinguistic activity requiring the assistance of another language user to help the child make his written expression coherent and adherent to the conventions of written language.

REFERENCES

1. L.S. Kubie, in A. Burrows, D. Monson, R. Stauffer. New Horizons in the Language Arts, (New York: Harper and Row, 1972), p. 205.
2. Loc. cit.
3. J. Bruner, et al. Studies in Cognitive Growth (New York: John Wiley and Sons, 1966), p. 27.
4. A. Burrows, op. cit., p. 206.
5. Hugh Mearnes, Creative Power in the Arts (New York: Doubleday, 1929).
6. M. Applegate, Helping Children Write (Evanston, Illinois: Row Peterson and Co., 1954).
7. Bear, Meta. "Children's Growth in the Use of Written Language" Elementary English Review 16: 312-319, December 1939.
8. A. Burrows, et al. They All Want To Write (New York: Prentice Hall Inc., 1952).
9. Helen K. Mackintosh, W. Hill. How Children Learn To Write Bulletin 2, Washington, D.C.: U.S. Office of Education, 1953.
10. A. Burrows (1972), p. 189.
11. M. Howell, The Control of Mechanisms of Expression and the Quality of Preceding Experiences. Unpublished Doctor's Dissertation 1955, reported in A. Burrows et al. Children's Writing: Research in Composition and Related Skills. Illinois: N.C.T.E. 1960-61.
12. Laura Zirbes, "Why Write?" When Children Write. Bulletin No. 95, Association for Childhood Education ed. C. Carr, (New York: 1955).
13. E. Smith, K. Goodman, R. Meredith. Language and Thinking in School (New York: Holt, Rinehart and Winston, 1970).
14. Op. cit., p. 242.
15. Courtenay B. Cazden, Child Language and Education (New York: Holt, Rinehart and Winston, 1972), p. 109.

16. Loc. cit., p. 200.
17. Maria Montessori, The Discovery of the Child. Kalakshetia Press, 1948.
18. P. Rozin, B. Bressman and M. Taft, "Do Children Understand the Basic Relationship Between Speech and Writing? The Mow Motorcycle Test," Journal of Reading Behaviour. Vol. VI, No. 3, 1974, pp. 1127-1134.
19. G. McNinch, "Awareness of Aural and Visual Word Boundary." Perceptual Motor Skills. 38: June, 1974, pp. 395-326.
20. J. Dawning and Peter Oliver, "The Child's Conception of 'A Word'." Reading Research Quarterly. Vol. IX, No. 4, (1973-74), p. 568.
21. R. Rystrom, "Perceptions of Vowel Letter Sounds Relationships By First Children." Reading Research Quarterly. Vol. IX, No. 2 (1973-74), pp. 170-185.
22. Frank Smith, Understanding Reading (New York: Holt, Rinehart and Winston, 1971).
23. B. Miller, J. Ney, "The effect of systematic oral exercises on the writing of fourth grade students." Research In The Teaching of English. No. 2, 1968, pp. 44-61.
24. D. Barnes, "An Experimental Study in Written Composition." Elementary English. 41: January, 1964, pp. 51-52.
25. M. Karnes et al. "The Effects of Typing Instruction on Creativity and Achievement Among the Gifted." Champaign, Ill. 1963.
26. Kellog Hunt, "Grammatic Structures Written at Three Grade Levels." Bulletin No. 3, N.C.T.E. Champaign, Ill. 1965, p. 159.
27. Cazden (1972), p. 202.
28. Ibid.
29. N. Goddard, Literacy: Language Experience Approaches. (London: MacMillan, 1974).
30. J. Moffat. Teaching the Universe of Discourse. (Boston: Houghton Mifflin), 1968.

31. N. Chomsky. Aspects of the Theory of Syntax.
Cambridge, Mass: M.I.T. Press, 1965, p. 33.
32. Moffat (1968). op. cit.
33. K. Goodman. The Psycholinguistic Nature of the Reading Process.
(Detroit: Wayne University Press, 1968).
34. Frank Smith. Comprehension and Learning (New York: Holt,
Rinehart and Winston, 1975), p. 192.
35. A. Forrester. "Learning The Language of Reading - An
Exploratory Study" Alberta Journal of Educational Research
Vol. 21, No. 1 M 75, p. 56.
36. J. Piaget, The Language and Thought of The Child.
(New York: Routledge and Kegan Paul Ltd., 1959), p. 3.
37. Ibid., p. 240.
38. Ibid.
39. L.A. Jakobovitz and M. Miron (ed.) Readings in the Psychology
of Language (New Jersey: Prentice Hall, 1967), p. 159.
40. Ibid., p. 304.
41. Ibid., p. 540.
42. Ibid., p. 585.
43. Smith, Goodman and Meredith (1970), p. 209.
44. J. Piaget (1959), p. 3.
45. Ibid., p. 117.
46. Ibid., p. 214.
47. Ibid., p. 271.
48. Ibid., p. 75.
49. Ibid., p. 238.
50. D. Elkind, J. Flavell, (ed.) Studies in Cognitive Development
(New York: Oxford University Press, 1969), p. 470.

51. Piaget (1959), p. 74.
52. Ibid., p. 127.
53. D.R. Rardin, C.E. Moan "Peer Interaction and Cognitive Development", Child Development 42: 1685-1699; December 1971.
54. Elkind and Flavell (1969), p. 469.
55. Piaget (1959), p. 258.
56. Elkind and Flavell (1969), p. 369.
57. J.N. Britten. "Language and Experience" in Exploration in Children's Language Writing. ed. Eldonna Everetts, N.C.T.E. Champaign, Ill. 1970, p. 61f.
58. L.S. Vygotsky, Language and Thought (Cambridge: Mass. M.I.T. Press, 1962), p. 100.
59. Frank Smith, G. Miller (ed.), The Genesis of Language. (Cambridge, Mass: M.I.T. Press, 1966), p. 105.
60. H.D. Cannon, "The Reading Process in the Perspective of Piagetian Theory." Unpublished Doctoral Dissertation (1973) Claremont Graduate School, Dissertation Abstracts, June, 1973.
61. Op. cit.
62. Mearnes. Creative Power in the Arts (New York: Doubleday 1929).
63. D. Holbrook. The Exploring Word (Cambridge University Press, 1967).
64. Mearnes (1929), p. 98.
65. K. Koch, Wishes, Lies and Dreams.
66. L.N. Nelson, "Inquiry into the Influence of Assigned Topics on Written Language." California Journal of Research, 16: 100-107, May 1965.
67. Logan. Formula for Creativity.

68. I.M. Teidt and Sidney W. Teidt, "Contemporary English in the Elementary School," (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1967), p. 378.
69. P. Torrance and L. Fortson, "Creativity Among Young Children and the Creative Aesthetic Approach," Education 89: 27-30 September/October, 1968.
70. P. Torrance. "Ten Ways of Helping Young Children Gifted in Creative Writing and Speech." Gifted Child Quarterly, 6: 121-7, Winter, 1962.
71. F. May, B.R. Tabachnik. "Three Stimuli for Creative Writing." Elementary School Journal. 67: 88-94, November, p. 1966.
72. Ibid., p. 210.
73. H. Anderson, W.L. Bashaw, "An Experimental Study of First Grade Theme Writing." American Educational Research Journal 5: 239-47, March, 1968.
74. P. Rozin, B. Bressman, M. Taft. "Do Children Understand The Basic Relationships Between Speech and Writing?" Journal of Reading Behaviour. Vol. VI, No. 3 (1974, p. 305).
75. M.F. Littwin. "Three Methods of Developing Imagination in Pupil Writing" English Journal. (October, 1935), 24: 654-661.
76. E. Saltz, F. Johnson, "Training for Thematic Fantasy Play in Culturally Disadvantaged Children." Journal of Educational Psychology, Vol. 66, No. 4, August, 1974, p. 623.
77. M. Perine, "Recording Children's Dictated Compositions." N.C.T.E. Champaign, Ill., Nov. 1967, p. 17ff.
78. M. Howell, "Aspects of Composition of Seven Year Olds" University of Wisconsin, 1955, reported in Children's Writing: Research in Composition and Related Skills. ed. Burrows et al. N.C.T.E. Champaign, Ill. 1960-61.
79. Burrows (1972) p. 196.
80. P. Evanechko, "Principles of Semantic Competence." Unpublished Paper, N.D.

81. R. Armstrong, "Principles of Teaching Grammar." Unpublished paper, N.D.
82. J. Porter. "Research Report on Applied Linguistics: A discovery approach to the teaching of Writing. Grades K-12. Elementary English. 52: 1019, N 75.
83. M. Botel, Forming and Reforming The Language Arts Curriculum. (Curriculum Development Associates 1975), p. 143.
84. R. O'Donnell, "The Correlation of Awareness of Structural Awareness in English and Ability in Written Composition." Journal of Educational Research, 57: 464-67, May/June, 1964.
85. Kellog Hunt (1965).
86. W. Loban, "The Language of Elementary School Children" (N.C.T.E. Champaign, Ill., 1969).
87. J. Porter, "Research Report" Elementary English, 53: 1021, N 75.
88. Ibid.
89. J.W. Ney, "Notes Toward a Psycholinguistic Model of the Writing Process," Research in the Teaching of English, 8: 157-69, Fall 74.
90. J.C. Mellon, "Transformational Sentence Combining," Cambridge Mass: Howard University Publications, 1967.
91. F. O'Hare, "Sentence Combining" (N.C.T.E., Urbana, Ill., 1973).
92. Ney (op. cit., p. 163).
93. Ibid., p. 163.
94. Ibid., p. 166.
95. C. Cazden (1972), p. 204.
96. J. Stewig, Read To Write (New York: Hawthorn Books, 1975), p. 30.
97. R.L. and B.B. Cramer. "Writing by Imitating Language Models," Language Arts, 52: 1011-14 and O 75.

98. Cazden, (1972), p. 202.
99. F. Smith, (1975), p. 192.
100. Smith, Goodman, Meredith (1970).
101. Ibid., p. 214.
102. Loc. cit.
103. G.F. Laubner, "Proofreading Abilities" (Unpublished Doctor's Dissertation, Boston 1964), Dissertation Abstracts 26: 6.
104. P. Groff. "Does Negative Criticism Discourage Children's Composition?" Language Arts 47: 1032, M 75.
105. Smith, Goodman, Meredith (1970), p. 212.
106. Britten in Everetts (1970 op. cit.) p. 61.
107. Burrows (1972), p. 207.
108. C. Sager, "Improving The Quality of Written Composition Through Pupil Use of a Rating Scale." Dissertation Abstracts 34, October 1973.
109. Smith, Goodman, and Meredith (1970) p. 257.
110. J. Porter, "Research Report." 53: 1023. D. Martin. Measuring Children's Story Writing, II.
111. Burrows (1972), p. 207.
112. Britten in Everetts (1970), p. 48.
113. Smith (1975), p. 191.
114. Ibid., p. 192.
115. E. Sapir, Culture, Language and Personality. (Berkeley: University of California Press 1949) p. 14.
116. Ibid.
117. Britten in Everetts (1970, op. cit), p. 21.
118. Ibid., p. 62.

119. B. Castiglione, "The Book of the Courtier" in D.E. Hayden, E.P. Alworth, G. Tate (ed.), Classics in Linguistics (New York: Philosophical Library, 1967).
120. Britten in Everetts (1970, op. cit), p. 39.
121. Piaget (1959), p. 75.
122. Smith, Goodman and Meredith (1970), p. 260.
123. G. Miller, G. McNeill, "Psycholinguistics" in G. Lindzey, E. Aaronson (ed.), Handbook of Social Psychology 3rd. ed. Vol. III (Ontario, Addison Weseley, 1969), pp. 666-794..
124. J.F. Kawanaugh, I.G. Mattingly, Language by Ear and By Eye, (Cambridge, Mass.: M.I.T. Press, 1972), p. 140.
125. Miller, McNeill (1969 - op. cit.) p. 719.
126. Ibid., p. 714.
127. Smith, Miller (1966), p. 265.

BIBLIOGRAPHY

BIBLIOGRAPHY

- Anderson, H., and Bashaw, W. An experimental study of 1st grade theme writing. American Educational Research Journal, No. 5, March, 1968.
- Anderson, W.L., and Stageberg, N.C. Introductory Reading On Language, (3rd Ed.) New York: Holt, Rinehart and Winston, 1970.
- Applegate, Mauree. Helping Children Write, Evanston, Ill.: Row Peterson and Company, 1954.
- Barnes, D. An experimental study in written composition. Elementary English, No. 41, January, 1964.
- Bear, Meta. Children's growth in the use of written language. Elementary English Review, No. 16, December, 1939.
- Botel, Morton. Forming And Reforming The Language Arts Curriculum, Washington, D.C., Curriculum Development Associates, 1975.
- Brown, Roger. Words and Things, New York: Free Press, 1958.
- Brown, Roger, and Bellugi, U. Three processes in the child's acquisition of syntax. In J. Emig, J. Elenning and H. Popp (ed.) Language and Learning, New York: Harcourt, Brace and World, 1966.

- Bruner, J.S. The course of cognitive growth. American Psychologists,
January, 1964, No. 1, 14.
- Bruner, J.S., et al. Studies in Cognitive Growth, New York,
John Wiley and Son, 1966.
- Burrows, Alvina, and Munson, P. and Stauffer, R. New Horizons
in Language Arts, New York: Harper and Row, 1972.
- Burrows, Alvina, et al. They All Want To Write, New York:
Prentice Hall, Inc., 1952.
- Burrows, Alvina, et al. Children's Writing: Research in
Composition And Related Skills, Champaign, Ill.:
N.C.T.E., 1960-1961.
- Cannon, Hashell, D. The Reading Process in the Perspective of
Piagetian Theory. Unpublished Doctoral Dissertation,
Claremont Graduate School, 1972.
- Cazden, Courtney. Child Language and Education, New York:
Holt, Rinehart and Winston, 1972.
- Chemshy, N. Language and Mind, New York: Harcourt, Brace and
World, Inc., 1968.
- Cramer, R.L., and Cramer, B.B. Writing by imitating language
models. Language Arts.

- Danforth, H. First aid in children's writing. Elementary English, April, 1962.
- Denby, R.V. An N.C.T.E./E.R.I.C. report on creative writing instruction in elementary school. Elementary English, February, 1969.
- DeMille, Richard. Put Your Mother On The Ceiling!, Children's Imagination Games, New York: Walker, 1967.
- Dewey, J. How We Think. Boston: D.C. Heath and Company, 1910.
- Dewey, J. Experience and Education, New York: Colliers, 1938.
- Dixon, R.M.W. What Is Language? London: Longmans, Green and Co. Ltd., 1965.
- Downing, John and Oliver, Peter. The child's conception of a word. Reading Research Quarterly, No. 4, 1973-74.
- Elkind, D. and Flavell, J. (Ed.) Studies In Cognitive Development, New York: Oxford University Press, 1969.
- Evanechko, Peter and Ollila, Lloyd and Armstrong, Robert.
An investigation of the relationships between children's performance in written language and their reading ability.
Research In The Teaching Of English, Vol. 8, No. 3, 1974.

- Evertts, E.L. Literature and composition in the elementary grades. New Directions in Elementary English, 1967.
- Forrester, A.D. Learning the language of reading: an exploratory study. Alberta Journal of Educational Research, Vol. 21, No. 1, M. 75.
- Funk, H.D. and Triplett, D. (Eds.) Language Arts In The Elementary School: Readings, Toronto: J.B. Lippincott Co., 1972.
- Ginsberg, H. and Opper, S. Piaget's Theory of Intellectual Development, Toronto: G.J. McLeod Ltd., 1963.
- Goodard, N. Literacy-Language Experience Approaches, London: MacMillan, 1974.
- Golub, L.S. Stimulating and receiving children's writing. Elementary English, January 1963.
- Goodman, Kenneth. The Psycholinguistic Nature of the Reading Process, Detroit: Wayne University Press, 1968.
- Grof, Patrick. Does negative criticism discourage children's compositions? Language Arts, 47: M 75.
- Hayden, D.E. and Alworth, E.P. and Tate, G. Classics in Linguistics, New York: Philosophical Library, 1967.

- Hillerich, R.L. Evaluation of written language. Elementary English, November, 1971.
- Holbrook, David. The Exploring Word, Cambridge University Press, 1967.
- Howell, Miriam. The control of mechanics of expression and the quality of preceding experiences. Unpublished Doctoral Dissertation, University of Wisconsin, 1955.
- Hunt, Kellogg. Grammatical Structures Written at Three Grade Levels, Champaign, Ill.: N.C.T.E., 1965.
- Hymes, Dell (Ed.) Language in Culture and Society, New York: Harper, 1964.
- Isaacs, S. Intellectual Growth in Young Children, New York: Harcourt, Brace, 1930.
- Jacobwitz, L.A. and Miron, M.S. Reading In The Psychology of Language, New Jersey: Prentice Hall, Inc., 1967.
- Karnes, M, et al. The Effects Of Typing Instructions On Creativity and Achievement Among The Gifted, Champaign, Ill.: N.C.T.E., 1965.
- Koch, Kenneth. Wishes, Lies and Dreams. New York: McGraw Hill. 1973.

- Kuse, H.R. I write more better with a partner. Elementary English, December, 1971.
- Kavanaugh, J.F. and Mattingly, I.G. Language by Ear and By Eye, Cambridge: M.I.T. Press, 1972.
- Laubner, G.F. Proofreading Abilities . . . Unpublished Doctoral Dissertation, Boston, 1964, Dissertation Abstracts 26: 6.
- Littwin, M.F. Three methods of developing imagination in pupil writing. English Journal, Vol. 24, October, 1935.
- Loban, W.D. The Language of Elementary School Children, Champaign, Ill.: N.C.T.E., 1963.
- Logan, Lillian M. and Logan, Virgil G. A Dynamic Approach to Language Arts. Toronto: McGraw-Hill, 1967.
- Luria, A.L. The directive function of speech in development and dissolution. Word, 15, 1959.
- MacIntosh, Helen, K. and Hill, W. How children learn to write. Bulletin No. 2, Washington, D.C., U.S. Office of Education, 1953.
- May, F. and Tabachnich, B.R. Three stimuli for creative writing. Elementary School Journal, No. 67, November, 1966.

- McNich, George. Awareness of Aural and Visual word boundary.
Perceptual and Motor Skills, No. 38, June, 1964.
- Mearnes, H. Creative Power in the Arts, New York: Doubleday,
1929.
- Mellon, J.C. Transformational Sentence Combining, Cambridge,
Mass.: Harvard University Publications, 1967.
- Menyuk, P. Syntactic structures in the language of children.
Child Development, 1963.
- Miller, B. and Ney, J. The effects of systematic oral exercises
on the writing of 4th grade students. Research in the
Teaching of English, No. 21, 1968.
- Miller, G.A. The magical number seven, plus or minus two.
Psychological Review, No. 63, 1956.
- Moffat, James. Teaching The Universe of Discourse, Boston:
Houghton Mifflin, 1968.
- Montessori, Maria. The Montessori Method, New York: Schochen,
1964.
- Montessori, Maria. The Discovery of the Child, Kalekshetra
Press, 1948.

- Murray, F. Acquisition of conservation through social interaction. Developmental Psychology, No. 6, January, 1972.
- Nelson, L.N. Inquiry in to the influence of assigned topics on written language. California Journal of Research, No. 16, May, 1965.
- Ney, N. James. Notes towards a psycholinguistic model of the writing process. Research in the Teaching of English, 8: 157 - 69, Fall, 1974.
- O'Donnell, R., Griffen, W. and Norris, R. Syntax of Kindergarten and Elementary School Children: A Transformational Analysis, Champaign, Ill.: N.C.T.E., 1967.
- O'Donnell, R. The correlation of awareness of structural awareness in English and ability in written composition. Journal of Educational Research, No. 57, May-June, 1964.
- O'Hare, F. Sentence Combining. Urbana, Ill.: N.C.T.E., 1973.
- Petty, Walter, T. Research in Oral Language, Urbana, Ill.: N.C.T.E., 1967.
- Perine, M. Recording Children's Dictated Composition, N.C.T.E., November, 1967.

- Piaget, J. The Language and Thought of the Child, New York: Meridian, 1955.
- Piaget, J. The Child's Conception of the World, Paterson, N.J.: Littlefield Adams, 1960.
- Porter, J. Research project on applied linguistics. Elementary English, 53, N 75.
- Possein, W.M. They All Need To Talk, New York: Appleton, Century, Crofts, 1969.
- Postman, Neil and Weingarten, C. Linguistics, A Revolution in Teaching, New York: Dell Publishing Co., 1966.
- Rardin, D.R., and Moan, C.T. Peer, interaction and cognitive development. Child Development, No. 42, December, 1971.
- Rohman, D.G. The vocabulary of becoming: an existential approach to writing. Elementary English, February, 1971.
- Rozin, P., Bressman, B. and McTaft. Do children understand the basic relationship between speech and writing? The now motorcycle test. Journal of Reading Behaviour, Vol. VI, No. 3, 1974.
- Rystrom, R. Perceptions of vowel letter sound relationships by 1st grade children. Reading Research Quarterly, Vol. IX, No. 2, 1973-74.

- Sager, Carol. Improving the quality of written composition through the pupil's use of the rating scale. Dissertation Abstracts International 34, October, 1973.
- Saltz, E. and Johnson, James. Training for thematic fantasy play in culturally disadvantaged children. Journal of Education Psychology, Vol. 66, No. 4, August, 1974.
- Sapir, Edward. Culture, Language and Personality, Berkeley University of California Press, 1949.
- Saporta, S. (Ed.) Psycholinguistics, A Book of Readings, New York: Holt, Rinehart, and Winston, 1961.
- Smith, E.B. and Goodman, K.S. and Meredith, R. Language and Thinking in the Elementary School, New York: Holt, Rinehart and Winston, 1970.
- Smith, F. Psycholinguistics, New York: Holt, Rinehart and Winston, 1971.
- Smith, F. and Miller G.A. (Ed.) The Genesis of Language, Cambridge, Mass.: M.I.T. Press, 1968.
- Smith, F. Comprehension and Learning, New York: Holt, Rinehart and Winston, 1975.
- Smith, F. Understanding Reading, New York: Holt, Rinehart and Winston, 1971.

Stewig, J. Read To Write, New York: Hawthorne Books, 1975.

Teidt, Ivis, and Teidt, Sidney, W. Contemporary English In The Elementary School, Englewood Cliffs; N.J.: Prentice Hall, Inc., 1967.

Torrance, Paul. Education And The Creative Potential, Minneapolis: University of Minnesota Press, 1963.

Torrance, Paul. Ten ways of helping young children, gifted in creative writing and speech. Gifted Children Quarterly, No. 16, Winter, 1962.

Torrance, Paul and Fortson, Laura. Creativity among young children and the creative aesthetic approach. Education, No. 89, September/October, 1968.

Uygotsky, L.S. Language and Thought, Cambridge: M.I.T. Press, 1962.

Whorf, Benjamin Lee. Language, Thought and Reality, Cambridge: M.I.T. Press, 1956.

Zirbes, Laura. Why write. When Children Write, Bulletin No. 95, New York: Association for Childhood Education, 1955.

APPENDICES

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APPENDIX I

Synopsis and observations of seven week study.

Information included:

- 1) Daily Motivation, Preparation and Product Chart
- 2) Daily Anecdotal Observation
- 3) Weekly Tally Sheets for Egocentric Language
- 4) Weekly Story Samples - Appendix II

MOTIVATION

PREPARATION

RESULT

	MOTIVATION	PREPARATION	RESULT
D A Y 1	Personal Expression: Experience	Discussion: A trip Where have you been? or Where would you like to go.	Dictation: About "A personal trip."
D A Y 2	Personal Expression Picture Study	Discussion: Extension from picture to self.	Dictation: A story either about picture or about self.
D A Y 3	Personal Expression "The Story of Night"	* Ideas of night - Description	Original: "Night Time" (story included)
D A Y 4	Persona Expression: Read some of the previous day's story.	On Individual basis discuss night. Plan new ideas. Help organize.	Dictation: The Night

<p>D A Y 1</p>	<p>Experience/Expression Recall of experience</p>	<p>Discussion: Tell me a story about you. Then we'll write stories about you.</p>	<p>Dictation: "My Story"</p>
<p>D A Y 2</p>	<p>Experience/Expression Connecting thoughts</p>	<p>Continuation: Help with order.</p>	<p>Dictation: My Story (Story included)</p>
<p>D A Y 3</p>	<p>Experience/Expression Adding imagination to expression.</p>	<p>Continuation: What has been exciting for you? Can we make the story sound exciting.</p>	<p>Dictation: My Story</p>
<p>D A Y 4</p>	<p>Imagination: Picture & Story of Snoopy</p>	<p>* Vocabulary help.</p>	<p>Original Snoopy & Woodstock</p>


MOTIVATION

PREPARATION

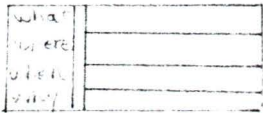
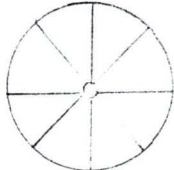

RESULT

	MOTIVATION	PREPARATION	RESULT
D A Y 1	Imagination: Fantasy Trip to Long Ago	Discussion of story Personal response Recall of details "Picture in My Eye" game.	Dictation: Another fantasy trip
D A Y 2	Characterization: Play with nut puppet.	"Cracking the nut" - discussion of plot Child's random ideas printed "in a nutshell" Reorder of ideas for story.	Dictation: A story about Mr. Nutty.
D A Y 3	Organization: Space Film	 Story Line -- "Take off-landing" Discuss: Child's ideas and sense image.	Dictation A trip through space.
D A Y 4	Sequence: Dramatizations of Indian legend.	* Building vocabulary Chipmunk goes hunting.	Original Composition Retelling the legend.

<p>D A Y 1</p>	<p>Imagination: "Crazy images"</p>	<p>Cumulative group poem A "Did you ever see a _____?" B "Never, no never, no never." Appreciation of humour.</p>	<p>Dictation: "A crazy world."</p>
<p>D A Y 2</p>	<p>Personal Expression: "Animal poem"</p>	<p>Discussion: Favourite animals. Animal movement play Talk to the animals.</p>	<p>Dictation: If I were a _____."</p>
<p>D A Y 3</p>	<p>Organization: Story time "Potato, Potato:</p>	<p>Choral speech: Poem from story Dramatization: of story for plot.</p>	<p>Original Composition: Retell story</p>
<p>D A Y 4</p>	<p>Sequence: Story: "Monkey See, Monkey Do."</p>	<p>Story in pictures Reordering & discussing Game. "Monkey Do"</p>	<p>Dictation: Monkey Story</p>

<p>D A Y 1</p>	<p>Characterization: Picture Study Two Suitable characters for story</p>	<p>Discuss: Characters:- Description-Action What is their problem? Map it.</p> 	<p>Dictation Story</p>
<p>D A Y 2</p>	<p>Characterization: Draw Charlie Brown 17 Cartoons: with someone else.</p>	<p>Discuss cartoons What is Charlie like? What does he do? What is his problem?</p>	<p>Original: Write Story for cartoon.</p>
<p>D A Y 3</p>	<p>Characterization: A Bug's Eye View Nature Walk</p>	<p>Poem: Big Black Beetle Discussion for experience 1) See a bug friend 2) Study what could be his problem in his world.</p>	<p>Dictation: Bug stories</p>
<p>D A Y 4</p>	<p>Characterization/ Imagination: Fantasy trip to Bug Jungle</p>	<p>* Dramatization: "The Bug Jungle: 1) Pick the bug 2) Pose this problem 3) Act it out</p>	<p>Original: "Story Bug"</p>

<p>D A Y 1</p>	<p>Plot/Imagination Poem to stimulate image "Peter, Peter, Pumkin Eater"</p>	<p>Choral speech "Peter-Peter, Pumpkin Eater." Describe his problem. Variations on them Imagine what really happened.</p>	<p>Dictation "Peter and his wife"</p>
<p>D A Y 2</p>	<p>Plot/Characterization Cartoon "Mr. Blockhead"</p>	<p>Discussion: What silly things could he do? What silly things could <u>you</u> do?</p>	<p>Dictation: Mr. Blockhead</p>
<p>D A Y 3</p>	<p>Plot/Coherence Story Shoemaker and Elves</p>	<p>*Dramatization: "Shoemaker and the Elves:</p>	<p>Dictation: "Shoemaker's Story"</p>
<p>D A Y 4</p>	<p>Plot/Sequence Story time. "Elmo and the Monkeys"</p>	<p>Outline main idea using story idea of line across the river. 1. 2. 3. 4.</p>	<p>Original Retell Elmo and the Monkey</p>

<p>D A Y 1</p>	<p>Organization Expression Nursery Rhymes</p>	<p>Recite and read Mother Goose Discuss Characters Chart Problems</p> 	<p>Dictation. Story from Nursery Rhyme Using Chart</p>
<p>D A Y 2</p>	<p>Organization: Model Story: "Tall and Taller Giraffe"</p>	<p>Discuss Question Words? Story Wheel</p>  <p>Fill in Ideas</p>	<p>Dictation: A New Tale of Tall and Taller Using what.</p>
<p>D A Y 3</p>	<p>Organization: Story motivator-- painted Indian rocks.</p>	<p>Recall of Indian stories Speculation on place of the rock in a story. - Map ideas</p> 	<p>Dictation: Chipmunk's rock using map.</p>
<p>D A Y 4</p>	<p>Organization: Read story "The Donkey's Egg"</p>	<p>* Dramatization: "The Donkey Egg"</p>	<p>Original: Retell story.</p>

Week 1

Day 1:

The children responded to questions about where they had been and were encouraged to tell what had happened. Shilpa (S₁) needed much prompting to speak at all and kept her eyes lowered most of the time. She seemed anxious about so much attention. Finally after Keven (S₂) had told about going to Vancouver, he gave her the idea she had been with the class to the library and she commented on this in several short sentences. Keven is able to carry on an animated conversation using good description and a fair amount of coherence. His written product is short but he tried to capture some of the interest displayed orally.

Day 2:

Children could choose from six pictures on the ledge. Subject of the pictures were children in various activities. The pictures were discussed while they were choosing. Shilpa (S₁) was most sympathetic to a little boy at the doctor's. Keven (S₂) was interested in some boys on bicycles. Shilpa dictated sentences including details about the boy. Keven used completely egocentric ideas - dictating a story about his bicycle riding.

Day 3:

A story about night, Margaret Wise Brown, "Sleepy Time Book" was read and children were prompted to tell what they felt about the night. Conversation openers such as "What do you hear at night? What do you think about in bed? Tell me of something that happened to you at night. Shilpa (S₂) identified night with frightening things while Keven (S₁) was adventurous. Both wrote of their night story about frightening incidents. - Shilpa's real, it would seem, but interpreted through her images of what night meant to her. e.g. "stars upon the sky; Keven's, a rather delightful imaginative episode with some attempt at description, eg. Scary Bary.

Day 4:

Following up on the experience stories told on Day 3, the same theme was used but dictation procedures were substituted for children's own writing to help them expand and refine the ideas about night.

Week 2

Day 1:

An experience story about what happened with the family over the weekend. Shilpa (S_1) had very little to offer and could not be coaxed to reply. The topic was altered and the researcher suggested we write "Shilpa's Story". When this was typed on the page she tapped out the line under the heading and became responsive to questions. The first installment was about when she was little there is obviously much syncretistic thinking and many large gaps but she was pleased with this effort. She began to read as it was typed and her attitude changed and became more relaxed. Although only a short story resulted, much conversation was possible to help her remember images from the past. As she watched she said, "I can spell Darasadon and Kishor (her uncle)." Most questions resulted in one word answers which she had to be helped to expand. Kevin's (S_2) weekend story showed many ideas surfacing and he was helped to organize how he wanted to put them down. He was very satisfied with his long story.

Day 2:

Shilpa (S_1) was encouraged to write another installment in her story. She answered questions politely but still with very short answers and could not connect ideas. She still watched the typing with interest and tapped out the lines under the heading. Kevin (S_2) dictated what he had done the night before - his story evidenced an attempt of description and was fairly coherent.

Day 3:

Shilpa (S_1) wanted to continue her own story and she talked about what she wanted to do when she was big. S_2 was shown a soccer ball as he has evidenced interest in soccer and he was motivated to write about a soccer game which has good sense of unity which developed as he talked to the researcher about the game.

Day 4:

A cartoon about Snoopy and Woodstock was shown to the whole class and a discussion was used to motivate them to write a story about these characters. S_1 used a very discursive style with little connection to original idea. A rambling repetitive story 9 c. u's long resulted. Kevin (S_2) tried to interpret the cartoon but left much out although beginning and ending were similar. S_3 and S_4 wrote imaginative stories on the same episode. Both were

coherent and detailed stories with good conclusions. S₄ did not seem to be able to get started and stopped several times to stare around room needed some prompting to attend to the last.
S₄ very self assured - worked throughout without stopping.

Week 3 Observations

Both subjects have produced considerably more language, both oral and written, than in the first two weeks of the study. Discussion is more natural although S₁ does not participate spontaneously and remains very hesitant in answering. S₂ is anxious to engage in the writing tasks and is eager to remain past the time limits. The dictated stories are becoming slightly more complex but this varies from day to day. What has been apparent however, is that a variety of choices about language are being surveyed. The children, especially S₂, will try several ways out loud with less embarrassment - playing with the sound of language and then deciding. They continue to watch the page coming out of the typewriter closely and helping with punctuation and spelling.

The subjects seem very aware that their language has been transformed to "a story" and are attempting to make better stories so they will have more fun reading them aloud. Time is always too short for the number of rereadings they would like. Reading seems like natural speech - expressive and fairly accurate - but often they change expression to something that fits into context better.

Day 1

The fantasy trip on Day 1, a series of verbal sense images, was very successful with S₂. When he opened his eyes he was already dictating his images to himself. He knew his own ideas and wanted to socialize them. S₁ had great difficulty in responding to imaginative suggestions. She reluctantly answered questions and could make few associations. She said she had no "pictures in her eyes" and tried to piece together some past experience. Much questioning of the "Recall of Detail" type was necessary for her to focus on something that had significance. She enjoyed the humour of the idea quickly when it came to her, although the story is short and somewhat incoherent. She was more and more pleased with herself and began to exchange glances both with the researcher and S₂ and giggle shyly from time to time.

Day 2

The two children took turns playing with the nut puppet and telling little stories to themselves and the researcher. A large nut was drawn and each child put ideas that could be in the story. This produced the most imaginative work in S₁ to date. She began to list descriptive words and associate ideas. She was identifying with the nut character and wanted to save it. S₂ was amused by the device and said the story was "hard nut to crack." He played with words and ways to get the nut open, e.g. squished, cracked, pried and his concern with this seems to affect the direction of the story as the nut could not be cracked although many means were used. As he read it to S₁ he was very amused at his own humour and she smiled as she read hers.

Day 3

The motivation for day three was a film on space. A planning session before writing helped children formulate ideas and a personal response to the film. This required 15 minutes of the half hour period before there was security of ideas. The best approach seemed a development of the sense impressions they would receive between launching and landing. And they developed a good vocabulary they used to advantage. The stories are descriptive and subjects have succeeded in giving them coherence. S₁ found repeating the story as it was typed helped her verify the sense to herself. The ideas were more fluent and she used quite varied description. S₂ was anxious to read it to S₁ using very effective sound effects and drama.

Day 4

The work of Day 4 was on sequence. To demonstrate the development of a plot an Indian Legend taken from the reader was dramatized by the whole class. The resulting expression of the subjects original stories included the major points of the story and came to a conclusion although there are many syncretistic statements. This, however marked an important step for both subjects in handling complex material without help.

Week 4 Observations

The amount of language being used by the subjects both independently and in dictation has increased gradually. More confidence and playfulness is resulting in more variety in the stories. The degree of complexity of sentence structure is slightly more noticeable in the control group and they tend to write more coherent stories with a markedly low number of illusions. The subjects of the study have a high percentage of egocentric language still and seem to have difficulty organizing the flow of the story. They need much help in getting ideas for the story and developing them. Much work continues in the imagination, playing with the possibilities; oral preparation and language input.

Day 1

To stimulate the imagination by creating impossible images and incongruous situation, a game "Never; no, never; no, never" was played. One child would ask the question

"Did you ever see _____?"

including a phrase of the most incongruous picture he could imagine e.g. "a dog wearing donuts on his tail?" and the other child would reply

"Never, no never, no never."

before inventing his own fantasy. Much hilarity resulted, but the range of images was relatively small. There was a tendency to

deal with things disproportionately large or small e.g. "hair a million miles long". S₁ found mental connection difficult, as playing with language using attributes of things unfamiliar. She did not know how to create these images and used S₂ as a source by changing his idea slightly. He spent time playing with the concept of flying, jotting down the objects he had already imagined flying e.g. school, house, store, yourself, elephant, desk. S₁ then took this idea too. On further questioning they tried to change the appearance of things using crazy comparisons e.g. a window like a chocolate bar; person with a drum head. S₁ would define in one word what S₂ had conceptualized, expecting listeners to interpret. There is still much evidence of egocentric state of her language and she needs to extend her frame of reference. S₁ was not really ready to write and the story is very egocentric showing fear for self, need of love and family. There is a poignant quality to it however, as this story does seem to get to the source for the first time and she begins to express her own ideas. S₂ reveals egocentric view and omits much necessary material but he was imagining and using his ideas as a source of written expression.

Day 2

Many of the images resulting from Day 1 preparation had to do with the animal world, therefore the motivation for day 2 stories was to pick a favourite animal and imagine what it would be like to be it. They could put their head down and try to imagine where they would live, what they would eat, what danger there would be, etc. with side coaching from the researcher. This they enjoyed and it stimulated the images. S₂ using the most fantastic animal, a unicorn, and creating a reality for it although he became very animated in his dictation. S₁ succeeded very well for her stage of development although much prompting was necessary. She developed an empathy for the animal, a monkey, and used many feeling statements, e.g. "I would feel badly about my tail. It hurts." Both had many illusions which may indicate that when using the imagination an egocentric expression is very difficult to avoid as all the details cannot be transmitted. However both children were writing from deep involvement, an experience they had felt even though S₂ considerably distorts scientific detail, e.g. elephants eating tigers, but it is right for him.

Day 3

The fairy tale about a magic potato was told to the class and then dramatized. It was a simple plot but very active. The control group wrote lengthy and coherent stories. The subjects began very well. S₂ worked very carefully at printing and the story shows a fair narrative style but he barely began the story. He seemed to have an egocentric problem of having to include everything he had thought or experienced. There was no selective organization of the important points. S₁ wrote a lengthy story but included so many details that she could not finish either but it is a promising improvement over other work she has done. Much more work is needed on the preliminary plan so children can pace themselves to complete the story. Sentence sense and complexity has not improved as much in the independent writing as in dictation but the approach and attitude is much more confident and children are willing to try much more.

Day 4

Opportunity to practise retelling a story and organizing the details was given using "Monkey See, Monkey Do", a tale about a monkey who sees himself in a mirror. Both stories get the significant fact that he gets rid of the bothersome other monkey and breaks the mirror at the same time. S₁ uses an egocentric approach in that she takes from the plot only what pleases her and ignores the rest. This results in a number of elisions. S₂ is more coherent and includes sufficient detail to make a personal and interesting recounting. The sentence structures are somewhat more complex than earlier. The humour of the situation is apparent to both and they play out this in the game - mirroring each other's actions and interpreting the rage of the monkey.

Week 5 Observations

The emphasis in week 5 was on ways to develop a story using a character. Both subjects seemed to work well with this - clustering ideas, descriptions and actions around the character in a rather more unified story development. The quantity and complexity of language in the stories dropped somewhat as more time seemed to be taken on re-evaluation of the first thought and redirection of it. This resulted in fewer elisions. The dictation, therefore was somewhat slower and often interrupted by such queries as "Should I put that in?" by S₁. An awareness of the outcome of the story was most apparent, both subjects concluding with lines that were appropriate. The assistance of the scribe was on ways of choosing and solving a problem of a character in a story.

Day 1

Animal pictures containing two characters were used as a key to the child's ideas. After the two characters were chosen, the researcher worked with S₁, eliciting verbal responses including adjectives and verbs that could define the characters and help the child clarify his own images. Then reasons for a problem in the interaction was explained using the plot diagram:



This produced a clear idea for development. S₂, meanwhile began by drawing a picture of the two characters, connecting them by a line and proceeded to chart his own problem. These charts were referred to as dictation proceeded and were successful in keeping subjects' ideas focused.

Day 2

Children identify strongly with Charlie Brown. His characteristics are established in their minds. They enjoyed drawing a cartoon of him. The direction was to include another character. During discussion the nature of the problem was defined and children then worked very well. They are both stressing good handwriting at this time. S₁ at first was most careful and then, caught by the ideas, speeded up and returned to old habits and produced a longer than usual story. S₂ laboured over the lines and did not finish although he was proud of what he had done.

Day 3 (stories included)

To elicit an imaginative response to experience the children were taken out to the field adjoining the school to find a bug friend. We walked looking closely at the ground, and then studied a small area in detail. The subjects were delighted and language was descriptive and many questions were asked. Returning to the class they tried to imagine what problem their bug friend might have. They began with description and S₂ produced a very imaginative cohesive story.

Day 4

Continuing the idea of day 3, the whole class was taken on a fantasy trip to the bug jungle with eyes closed, images were evoked of the tall grass, sunshine on their backs, soggy ground, etc. Then in groups of six they characterized one creature in the bug world and solved a problem it might have by acting it out. Delightful images and language resulted, e.g. a chant - "Go grasshopper, go." - that developed by the group to get him away from a swooping bird. The stories produced by the whole class were excellent. Both S₁ and S₂ became very involved with the character from day 3 and expanded it considerably.

Week 6 Observations

The concern for the week was developing story ideas using imagination, characterization coherence, or unity and sequence to help children improve their writing. By the end of the week both subjects were producing longer stories than ever which had a feeling of direction and flow.

Day 1

The subjects recited "Peter, Peter, Pumpkin Eater" and then play acted it. The use of dialogue in the stories reflects the exchange that went on as they were able to see that both points of view were related. In the writing of S₂ no elisions were noted. Both stories used an original idea to develop their story and enjoyed immensely reading them to each other.

Day 2

The researcher drew a box on the board and then proceeded to animate it as a "blockhead." Children were entranced and drew "blockheads" of their own. In discussion about a blockhead S₂ made many suggestions about the silly things a blockhead might do. S₁ did not understand the concept. When asked if she ever did anything silly she looked embarrassed and shook her head. The humour of "Mr. Blockhead" escaped her and she was dependent on S₂'s ideas. As she dictated she read aloud one word at a time and sometimes verbalized the spelling. She became focussed on the mechanics as the story didn't have much significance to her. S₂, with more sense for the incongruous, loved his story.

Day 3

Dramatization with this group always produces very good story results. The story "The Shoemaker and the Elves" was told to the group and then two groups prepared their version to share with the others. The inhibition is reduced and they were all able to participate. They were helped at the writing stage to try to cover all the important things in the story by a discussion of the "acts" or natural divisions in the story. Excellent coherence and detail resulted for both the subjects.

Day 4

A story from the reader "Elmo and the Monkeys" was chosen for narration. The two subjects looked at the book and then told their version. It was a most beneficial exercise as they realized that the sequence was important and often had to back track. This was also apparent in the finished copy of S₂ Sentence sense, however is weak as they seemed intent on getting the plot clear.

Week 7. Observations

Discussion each day stressed some model to help them collect their thoughts and the resulting stories are original, descriptive, lengthy and interesting. They were, under supervision, better able to co-ordinate all the elements of story writing. In independent work much freer use of language is noticeable. What isn't apparent is the increased feeling of satisfaction they had of knowing how to write a story. Both subjects are anxious to have all their stories in a book to take home and reread them. They feel they are as good, if not better, than the stories in their reader. This point of pride makes them anxious to do more. S said about Day 3, "It's my best story--no mistakes. It would take me two hours to write it by myself. Maybe I could do more at home to put down everything I think"? Language is more socialized because they are trying to share what they think first with researcher, then the other subject in rereading. They have begun to question each other on rereading, and finally their teacher and parents are the audience.

In the final week work had progressed very well. Both subjects seemed to need help still in organizing their ideas before starting to write.

Day 1

The simplicity of nursery rhymes was used as a model and then subjects were shown how to write around a central idea by answering the "5W" questions and come to a conclusion. This was a cumulative exercise in which all the elements used to date were incorporated imagination, the problem or plot, characterization description and sequence. In the Mother Goose book they were asked to pick a favourite and then find the reason for the rhyme and make up a new ending to the story. This was modelled on the successful work with "Peter, Peter in week 5."

Day 2

A short passage story about the adventures of Tall and Taller-two giraffes was read to them. They enjoyed the story but were not stimulated greatly to put them in another story. Perhaps it was the incongruity of the giraffes and the fact that they had difficulty characterizing them which inhibited the stories.

More time than usual was necessary for discussion and the associations, connections were unclear with. It was not a meaningful tape and they became somewhat bored. The organizational device was the most interesting part of the writing time. A wheel was drawn with spokes partitioning it. The random ideas of the child for the child were put in the wheel then he could decide how to use what they knew about giraffes into the story. S₂ methodically checked off the data as he incorporated it into the story.

Day 3

Day three was one of the most successful days to date especially for S₂. The motivation captured their imagination and they were able to use their own ideas freely. A smooth rock with an Indian face was on the table when they arrived. Much questioning and handling occurred and they decided it must be an Indian rock.

The theme and details of this story bear some resemblance to the Indian legend which had been told to the class two weeks previously. How it has been reworked to include the motivational device shows that children need to make connections with what is already part of their experience in their creative writing. The Indian rock brought to the surface a recent experience from which they could draw information to include in the story.

S₁ was included in S₂'s story writing and being less verbal was helped both by hearing him plan his story and then read it to her. However, she was able to make her own connections with this assistance and in no way indicated that she had taken Kevin's idea. She had to recreate in her mind the connections and express them in her own way. Both children felt a good deal of pride in these stories and wanted to take them home to read them. They felt they were good enough for a book.

The organizational device for mapping the story was most useful and it was kept before them as they debated tracing the patterns with their finger to show how things were connected.

Day 4

The final day was saved for a dramatization. The story "The Donkey's Egg" is in their reader. After brief discussion and orientation the group played it out twice. S₁ was immediately sure of what she wanted to do. At the beginning she had little confidence and did not enter into group games well. She is now most sociable--to the point of directing several other girls to join in her play. S₂. Her original story reflects her involvement and confidence identified with one part and really wanted to do it but the group chose another. His story shorter than the day before reflects the loss of interest he felt--social skills still very egocentric. He is in their regard erratic. Sometimes very socialized in his language both oral and written sometimes regressing. This is apparently a transition state for him and the scribing encounters have assisted him. S₁ has made the most growth in this regard and now use more and more varied language with ease and confidence. She will look at the researchers and enjoy sharing and reading her stories. A bond has been made that has helped her through the transition.

179 (a)

APPENDIX II

Tally S: Wk 3

SUMMARY OF SYNTACTIC COMPLEXITY

0-Count Structures

- A. Sentence Patterns
 - 1. S-V (Adverbial)
 - 2. S-V-O
 - 3. S-be-Complement
 - 4. S-V-Infinite
- B. Simple Transformations
 - 1. Interrogative
 - 2. Exclamatory
 - 3. Imperative
- C. "and" structures
- D. Non-sentence structures

Total Value

1-Count Structure

- A. Sentence Patterns
 - 1. S-V-IO-IO
 - 2. S-V-O Complement
- B. Noun Modifiers
 - 1. adjectives
 - 2. possessive
 - 3. predeterminer
 - 4. participle
 - 5. prepositional phrase
- C. Other Modifiers
 - 1. adverbial
 - 2. modal
 - 3. negative constructions
 - 4. set expressions
 - 5. gerunds
 - 6. infinitives
- D. Coordinates
 - 1. Coordinate structures
 - 2. Coordinate deletion
 - 3. Paired Coordinates with "and"

5
12
6
14
37

29
38
40
27
134

Total Value

2-Count Structures

- A. Passives
- B. Paired Coordinates
- C. Dependent Clauses
- D. Comparatives
- E. Participles
- F. Infinite as Subject
- G. Appositives
- H. Conjunctive Adverbs

Total Value

3-Count Structures

- A. Clause as subject
- B. Absolutes

Total Value

	3:1	3:2	3:3	3:4
0-Count Structures	//	//	//	//
1. S-V (Adverbial)	//	////	///	////
2. S-V-O	/	//	/	/
3. S-be-Complement			//	
4. S-V-Infinite				
B. Simple Transformations				
1. Interrogative				
2. Exclamatory				
3. Imperative				
C. "and" structures				///
D. Non-sentence structures				
Total Value	5	12	6	14
1-Count Structure				
A. Sentence Patterns				
1. S-V-IO-IO		/	//	
2. S-V-O Complement				
B. Noun Modifiers				
1. adjectives	///	////	////	//
2. possessive	//	//	///	///
3. predeterminer	////	////	///	////
4. participle			//	
5. prepositional phrase	////	////	////	///
C. Other Modifiers				
1. adverbial	///	///	/	///
2. modal	//	/	/	/
3. negative constructions				/
4. set expressions				
5. gerunds	//	///	///	/
6. infinitives				
D. Coordinates				
1. Coordinate structures	///	/	////	
2. Coordinate deletion	/			
3. Paired Coordinates with "and"	///		///	////
Total Value	29	38	40	27
2-Count Structures				
A. Passives				
B. Paired Coordinates				
C. Dependent Clauses	/			/
D. Comparatives				
E. Participles				
F. Infinite as Subject				
G. Appositives				
H. Conjunctive Adverbs				
Total Value	///		///	/
3-Count Structures				
A. Clause as subject	5		5	
B. Absolutes				2
Total Value	5		5	2

15 min planning.

Ideas fluent -
Comparison easy
She proceeded quite quickly after planning period but was not too interested.

Repeated as it was typed.

Ideas very similar to Kevin's He was first. While she drew.

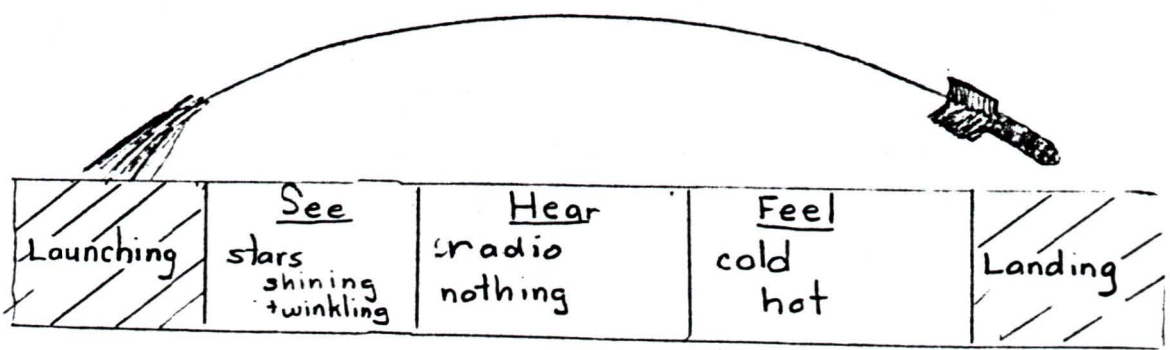
Re-reading quite fluent.

If you want to go to another country
1 you have to go by plane. / If you want to go
2 to another world you have to go in a rocket!
3 When you are ready to step on the moon you
4 have to wear your suit. / And you can always
5 see stars when you see outside / and you will
6 see the stars shining and twinkling and
7 bright. / Mars is red. / I like to eat Mars
8 Bars but I do not have them every day. / If
9 you forget your suit and if you go outside
with your old clothes you will be dead.

9 now!
revised
9 com units
102 words

(8)

Other file



The Rocket

When you want a space trip you've

Personal response
to story in film.

Planning

session necessary



- 1 got to go by rocket/ From launching to
- 2 landing you see a lot of space/ You see
- 3 stars that are shiny and bright/ - they're
- 4 twinkling in the blackness of space. #
- 5 Meteorites and shooting stars are things you
- 6 see in space. The planets Mars, Venus and
- 7 the sun are visible in space. # Mars looks
- 8 like a Mars Bar. # like being in space
- 9 to see the Mars Bars lit up like a neon
- 10 sign.

Feelings:

- stiff
- funny
- cramped
- squished
- nervous
- tidgety

Hear:

- sonic boom
- Spurt of power
- humming
- instruments
- radio
- static

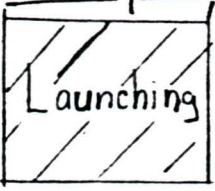
See:

- Stars
- Shadows
- Black holes
- pointed light
- Space

- 11 In space travel, I feel stiff in my
- 12 suit/ My head feels hot/ Hot - hot - hot.
- 13 and my feet are hot, too/ From sitting in
- 14 one spot in the rocket, I feel funny. Rocky
- 15 in the rocket - it makes me feel funny and
- 16 nervous! What's that.? Sputtery... Sputter!
- 17 I hear a sound/ I wonder if it is the motor
- 18 quitting/ I radio to find out and it was
- 19 just the radio sputtering. Lots of static
- 20 in space/ We get there and land safely.
- 21, 22, 23

revised 21 comments
(13 words)

#



Reactions:

It's my best story. I got the most done with no mistakes.

TAPE SCRIPT #1

- M. /I don't know what to draw/
- T. You don't? Close your eyes till you get an idea.
- M. /I like Mother Nature/ (drawing grass) /It's in my picture/
- T. What is Mother Nature?
- M. /You see the grass/..A walk in the forest/..and grass/..and flowers/
You see all the trees/and well../Like the grass and flowers/
- T. That's it is it?
- M. /Yes/
- R. We go on lots of outings/ We see lots of things/in Mother Nature.
Like we see fields/..and go for a walk/..but I don't like it if../
without my shoes/
- M. Why?
- R. Well/ there might be worms/and it gives me a funny feeling/
- T. What feeling?
- R. I don't know/..in my body/
...It's like its sick/ But I like Mother Nature/
- T. I wonder why they call it Mother Nature?
- R. /Well, its../Everything/
- T. Why do we say "Mother?"
- M. It's /...babies?/ Yeah/ A mother's../have babies. (drawing -talking to
self) She made the trees and everything./ She must be their mother../
I think../I don't know.
It might be../I don't know./ Yeah./
It might be../(draws busily)
- T. It might be what?
- M. I don't know./..how you would say it/...(concludes discussion, then
wonders quietly.) /There must be a f.../(busies herself drawing)
- T. What were you going to say?

- M. Nothing./I was going to say father./ I don't know why./Well./
(Pensively)...I don't know why./ I don't know./
Do you think anybody knows?/
- R. / I don't know./
- M. (Giggles) Mother Nature knows./ What ever it is/how'll we find out?
- T. Do you think somebody knows?
- M. ...Maybe./..Mother Nature./
- T. Why do you think so?
- M. I was thinking about it last night./
- T. Can you make a story of your picture about Mother Nature?
- M. Well./..like my mom was raised on a farm./ I was born on a farm too./..
mmh./my grampa./..he had a whole bunch of horses./..and...we.../
my mom used to take me/on so many rides on horses/every day/and so I
just like them./..and forever./ I want a house of my own/

APPENDIX III

Name Michele + Rapa, Age 7-8

Date Nov. 13.

Piagetian Categories of Speech

Total Communication Units

70

A. Egocentric Language

I. Echolalia - Word repetition
Phrase repetition
Incoherent sounds

II. Monologue - 1. Accompanying action
2. Commanding self
3. Inventing
4. Language play

III. Collective Monologue - 1. intent
2. feeling
3. fact
4. self reference
5. opinion

B. Socialized (Adapted) Language

I. Dialogue - 1. information
2. self-reference
3. propositional response
4. opinion

II. Criticism - 1. personal deprecation
affective state- 2. personal aggrandizement
ment 3. depreciation of people
4. agrandizement of others

III. Question - 1. pseudo-question
2. request for information
3. request for explanation
4. inquiry about other

IV. Answers - 1. information
2. explanation
3. response to inquiry
4. evasion

V. Unclassified - Mazes and incomplete placeholders

	Frequency Tally	%
	 70 3	4%
	 70 18.25	25.7%
	 70 24.34	34.7%
	 70 4	5.2%
	 70 8	2.8%
	 70 11.7	17%
	 70 8.1	11.4%

V. (cont.)

- IV Answers - 1. information
2. explanation
3. personal response

✓ Unclassified

Tally	%
1	ϕ
	ϕ

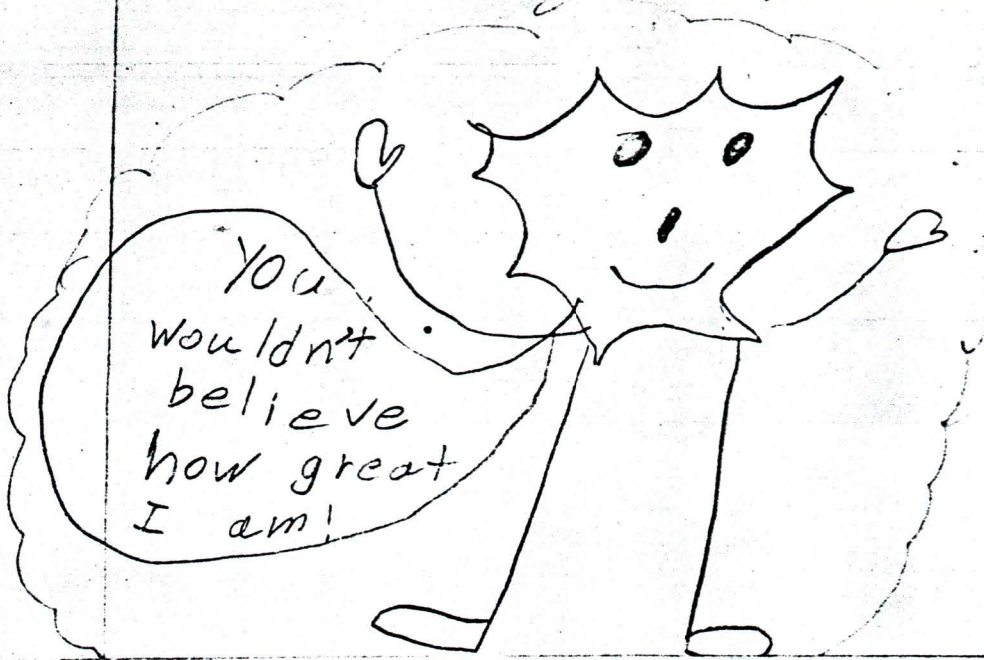
Jan 15

Shilpa

I am proud to go to the school / H
I like it very much / H
I am proud that I am a new girl /

22 words
3 complete

2.H



49 words
3 c u

@H

I felt great in
 otawa when I was
 the only kid on
 baseline road that
 had a racing ex-
 track! And I feel
 great that im nine
 years old because
 my favorite numb-
 er is nine! And I
 feel great because
 I got 10, from
 my nanna to spend

VITA

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Educational Institutions Attended, with Dates of Entering and Leaving:

University of British Columbia, B.C. 1952 to 1970

University of Victoria, B.C. 1975 to 1978

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_____ _____ _____

Honours and Awards:

Publications:

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Grade

Author:



Signature

Joy Nan Marampon

Name

April 28, 1978

Date