# THE RELATIONSHIP BETWEEN SYMBOLIC STYLE AND

# KINDERGARTEN CHILDREN'S EMERGENT WRITING

by

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## ABSTRACT

According to research, differences in the way young children learn using symbols is a characteristic of growth and development. Harvard's Project Zero researchers have suggested that children possess characteristic styles of symbol use in the way they draw, create using clay and play objects, and tell stories. In particular, the "symbolic styles" of Patterners and Dramatists have been identified. This study investigated the relationship between kindergarten students' preferred symbolic style and their early writing attempts. Six focal children (3 Patterners and 3 Dramatists) were selected from a total of 26 children. Over a period of 4 months, data were collected at a classroom writing centre. Collected data included the children's written and drawn products, audiotaped recordings of the children's talk, observations of journal writing sessions, and taped responses to interview questions. This data were analyzed to determine any similarities or differences in each groups' approach to journal writing and their views about writing. Data analysis revealed both similarities and differences between Patterners and Dramatists. Differences among group members were observed in some instances. Discussion compared the children's written/drawn products and observed writing behaviors both to each other and to those described in the literature.

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# CHAPTER ONE

## Introduction to the Study

### Introduction

The role of children's drawings in developing written expression has been a topic of increasing interest in early childhood education over the past few years. There is a growing awareness that 'every child has a story to tell' (Graves, 1983). Perhaps as teachers we have been missing parts of this story by not seeing the interrelatedness of drawing, writing, and oral language. The often repeated phrase, "A picture is worth a thousand words" might continue to be overlooked by some teachers who disregard children's drawings and see them as "added frills". Just as we are now looking at language arts from a holistic perspective, we need to look at all the channels of communication a child uses to acquire language and make sense of print.

Children's drawings are "viable tools for problem solving .... Through them children make sense of the world, and impart their visions" (Hubbard, 1987, p. 60). In this respect, drawings represent an essential part of written communication for young children. As Graves' (1983) research clearly demonstrates, there is a developmental sequence that characterizes the beginning writer's progression from drawing to composition.

Writing and drawing can both be viewed as symbolic tasks. Children have been found to exhibit characteristic approaches to symbolic tasks such as drawing and symbolic play. Wolf and Gardner identified two symbolic styles. One group of children were called Patterners, the other group Dramatists. No research has been conducted that explores how a young child's approach to writing is influenced by their approach to symbolic tasks in general. One study conducted by Dyson (1986) described how four kindergarten children's beginning writing showed signs of differing symbolic style. However, this was not the original intent of her research, but rather an interesting discovery. Dyson's work focused on only a small sample of children. Thus, more research needs to be done in this area if we are to fully understand how young children learn to use symbols to communicate their 'stories'.

## Background to the Problem

This study was developed from the theoretical perspective of Vygotsky (1978) who located the roots of writing development in the young child's growing ability to use varied symbols. The ability to compose written text - to convey meaning through letter graphics - grows out of gesture, speech, dramatic play, and drawing.

Recent investigations of young writers provide insight into how children use other media, particularly drawing, as

they discover the unique structures and strategies of each symbol system. For example, children's understanding of the symbol system of drawing (of using lines and curves to represent objects) may serve as a transition to their initial understanding of the symbol system of writing (of using the lines and curves of letters to represent the names of objects) (Dyson, 1982; Ferreiro & Teberosky, 1982). In addition, young children's spontaneous texts are often composed of multiple media, including drawing, talking, and writing. Harste, Woodward, and Burke (1984) suggest that "border skirmishes", in which children waver between writing and drawing, may help children pose and resolve the problems involved in their re-invention of written language.

According to Dyson (1986), the relationship between drawing and writing is "a deceptively simple one" (p.381). She describes young children as 'symbol weavers'. The imaginary worlds they form on paper may rely on varied symbol systems or media. However, as children develop as symbol users, they soon discover the distinctive nature and powers of each form of communication (Wolf and Gardner, 1981).

Finally, while drawing, children may reveal different approaches to the graphic activity. They have differing styles or preferred ways of doing things. Differences between socially-oriented and object-oriented styles have been documented in children's use of varied media, including

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speech and drawing. In drawing, for example, certain children may focus on the physical aspects of a figure to be represented; others may use graphic symbols as props in a told story (Gardner, Wolf, & Smith, 1982). These differences in use of symbolic materials may lead to different learning paths. Different children may focus on and develop different aspects of the complex symbol-producing process at different times (Bussis, Chittenden, Amarel, & Klausner, 1985; Nelson, 1981; Wolf & Gardner, 1979).

If one accepts both the assumption that writing grows out of "the entire history of sign development in the child" (Vygotsky, 1978, p.106) and the assumption that individual differences may be observed in how children approach open-ended composing tasks, one can assume as well that there are differences in the resources and the tensions children experience as they attempt new forms of symbolizing. In her research on individual differences, Nelson (1981) stresses that most children fall between the two extremes of style (referential versus expressive); further, children may display different styles in different situations. Nonetheless, studying children with contrasting styles illuminates both the distinctive nature of the symbol system to be learned and the challenges that system poses for learners.

## Statement of the Problem

The capacity to use symbols has often been considered the hallmark of human cognition. Yet, very little has been established concerning the early course of this crucial human ability. Although few scholars have assumed that the acquisition of symbolic competence is a simple process, much investigation has tended to lump all symbolic systems together or to study only one in depth while ignoring its relation to other symbolic systems.

In today's schools it is not uncommon to find writing instruction occuring from the first day of grade one. It is even occuring in many kindergarten programs. As writing activities and instruction move to lower grades, educators should be increasing their knowledge of what influences writing development at early ages. We know that children differ in style in the areas of drawing, symbolic play and oral language development. If children's development as symbolizing beings is influenced by their preferred symbolic style, we need to know what influence this will have on their early writing attempts. What influence will this have on their perceptions of writing? Further research is required to fully understand the universal properties of symbol use, those aspects of symbolization that may differ across media and the nature of possible differences among individuals in patterns of symbol use.

## Purpose of the Study

The purpose of this study was to investigate the relationship between kindergarten students' preferred symbolic style and their early writing attempts. Their perceptions of the nature of writing, as well as the processes involved in writing were also examined.

## Questions

The study attempted to answer the following research questions:

1. Do children who differ in symbolic style (as identified using Sullivan's [1986] criteria) also differ in their early writing attempts? If so, what is the nature of these differences?

   1a) What role do drawing and writing serve in one graphic product? Are there differences between the way Patterners and Dramatists combine drawing and writing in their work?

   1b) What personal stance is evident in the children's texts? Does this differ between Patterners and Dramatists?

   1c) Is there evidence of narrative movement in the children's written products? Do Patterners or Dramatists include more movement in their texts?

**1d)**  Are there differences in the message quality of Patterners and Dramatists compositions?  If so, what is the  nature of these differences?

**1e)**  What role does language play in each groups' approach to writing?

**1f)**  What meaning elements are contained in the children's drawing, talking and writing?

**1g)**  What topics are evident in the children's talk as they draw and write?  How relevant is this talk to their ongoing  journal activity?  What differences are there between the topics of Patterners and Dramatists talk?

**2.**  Do Patterners and Dramatists differ in their perceptions of the nature of writing and the processes involved in writing?  If so, how do these perceptions vary?


## Definition of Terms

**1.  Symbol** - something that stands for something else; something concrete that represents or suggests another thing that cannot in itself be represented or visualized

**2.  Symbolic Style** - a distinctive or characteristic manner in which a person uses symbols.  Such a style has many components, including the means whereby children select information, capture it in symbolic forms, organize it into coherent messages, and transmit it delibertly to others.

**3. Patterners** - (as described by Wolf and Gardner, 1979)
children who display a strong interest (and skill) in the
configurational uses of materials -- the making of patterns,
structures, and orders. They exhibit a persistent curiosity
about the object world around them. They want to know how
something works, how it might be named, how to explore and
vary it. Given materials, such children are more interested
in mechanical and design possibilities than in communication
or recreation of personal experiences. Language is only a
peripheral part of the drawing process. Patterners are
attracted to repetitive patterns and often they tend to
plunge directly into drawing or building tasks. They have
sometimes been called visualizers.

**4. Dramatists** - (as described by Wolf and Gardner, 1979)
children who are socially oriented and display an abiding
interest in the human surrounding: what others do, how they
think and feel, how others can be contacted and affected.
For them, drawing processes are interwoven with talk. They
make extensive use of narrative during drawing. Dramatists
often appear more reflective of task at hand. All their
energy is devoted toward effective communication with others
and toward dramatic sharing of their experiences.

**5. Personal stance** - the role or stance which the child
author appeared to be taking as they worked.

**6. Narrative Movement** - (as defined by Dyson, 1989, p.296) used for describing time. Narrative movement existed in a text if there were two temporally ordered, independent clauses presenting action or a character's reaction.

**7. message quality** - (a term borrowed from Clay, 1975) the child's control over the formulation of meaning and the system for transcribing that meaning.

**8. Meaning Elements** - those components through which meanings are expressed (includes objects, actors, actions, placement in space and time, and sensorimotor qualities).

## Introduction to the Design and Sample

The study examined kindergarten children's exploration of the symbol systems of drawing and writing. The students attended the same Kindergarten class for either the morning or afternoon session.

Data collection was divided into two phases. Phase one (lasting 6 weeks) was an identification phase in which all 26 students participated. Twelve symbolic style tasks were administered to each child to determine any patterns in their approach to these tasks. Criteria adapted by Sullivan (1986) from Wolf and Gardner's (1979) research was used to assess media responses. Case study children were selected who demonstrated an identifiable symbolic style. The Peabody Picture Vocabulary Test - Revised (PPVT-R) was administered to these selected children.

Phase two lasted four months. Data was gathered on six case study children as they worked at the Journal Writing Centre. Comparisons of approach to writing were made between Patterners and Dramatists. Each child was interviewed individually about writing.

## Limitations of the Study

1.  The use of intact groups limits the making of generalizations beyond this study.

2.  Sample size was relatively small (26 for phase one and 6 for phase two). Phase one included all kindergarten children in both the morning and afternoon sessions. Subjects for phase two were selected on the basis of demonstration of strong patterns of symbolic style on the symbolic tasks administered.

3.  The two groups attended kindergarten at different times of the day. Group one attended mornings all year and group two attended in the afternoons. This time factor may have affected the results of phase one. The childrens' abilities to attend to and respond to the tasks given may have been affected. Also, the teacher may have responded differently to the children at different times of the day.

4.  Varying levels of intelligence among the subjects was another limitation of this study. Intelligence Quotients of the subjects were not available. With no

random sampling, this factor could not be controlled for in this study. However, an estimate of receptive language vocabulary, measured with use of the Peabody Picture Vocabulary Test - Revised (Dunn, Dunn, Robertson, & Eisenberg, 1981), was used to determine the similarity between the two groups. Although PPVT-R scores should not be interpreted as intelligence test scores, studies have indicated comparable mean standard scores between the PPVT-R and McCarthy Scales of Children's Abilities (Mitchell, 1985, p.1127).

5. Only those aspects of learning which were made public through children's written/drawn products, actions and talk were tapped. Although the data base is rich with examples, much more may have gone undisplayed and therefore unavailable for analysis.

6. Subjects for phase two were selected on the basis of their patterns on behavior on twelve tasks administered to determine their preferred symbolic style. Although these tasks were adapted from those used in Wolf & Gardner's (1979) and Sullivan's (1986) research, their validity as accurate measures of symbolic style is still somewhat questionable.

7. Many of the coding procedures were adapted from Dyson's (1982, 1989) research. The findings reported in this study are only as valid as this analysis was accurately exposing the children's writing behaviors.

## CHAPTER TWO

## Review of the Literature

### Introduction

The capacity to use symbols has often been considered the hallmark of human cognition. Adults in all cultures utilize (and even devise) a wide range of symbol systems, ranging from language and gesture, to drawing, sculpture, music, and dance. In Werner and Kaplan's (1963) model symbolizing involves the symbol itself (e.g., a graphic form), the symbolic referent (the experience being referred to), the person producing the symbol, and an intended recipient. A symbolic act is guided by the producer's intention -- what the person wants to accomplish. Smith (1981) described symbolization as a means to conceptualize and communicate personal insight about experiences. Bates (1979) saw symbolization as a selection process whereby the individual chose one aspect from a complex array that could serve as a "light-weight mental token that can be substituted for the entire knowledge-package"(p. 65). The capacity to create and decode was based on the implicit recognition that an element, or set of elements, could stand for some object or experience.

The development of symbolic competence involves the ability to attribute meaning to abstract forms and is a particular characteristic of human intelligence.

Acknowledging the centrality of such symbol use, students of human development have portrayed the acquisition of proficiency in symbolization as a primary achievement of the first year of life (see Bruner, Olver, and Greenfield, 1966; Piaget, 1962; Werner and Kaplan, 1963). Indeed, by the time children are 5, 6, or 7, they are generally quite skilled in the use of several symbol systems, exhibiting the capacities both to produce "legible" messages in these systems and to "read" those communications fashioned by other members of the culture.

Even though an insistence on the importance of symbol use is not in itself controversial, very little has been established concerning the early course of this crucial human ability. Although few scholars have assumed that the acquisition of symbolic competence is a simple process, much investigation has tended either to lump all symbolic systems together or to study only one in depth while ignoring its relation to other symbolic systems. As a result, the universal properties of symbol use, those aspects of symbolization that may differ across media or across cultures, and the nature of possible differences among individuals in patterns of symbol use have not yet been fully ascertained.

To understand the range of individual differences in the way young children make meaning out of objects, images, and utterances, recent research has attemted to identify

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patterns of development in the way individuals use symbols. Numerous studies of symbolization were conducted as a part of Harvard's Project Zero which sought to construct a model of individual symbolic competence and trace its development from infancy to artistry (Gardner, 1976; Gardner, Wolf, & Smith, 1975; Ives, Silverman, Kelly, & Gardner, 1981; Perkins & Gardner, 1978; Winner, Rosensteil, & Gardner, 1976; Wolf & Gardner, 1979).

Wolf and Gardner (1981) theorize that there is a developmental sequence to children's understandings of how meaning can be represented through symbolic forms. The discovery of new ways of encoding meanings underlies abilities in varied symbol systems (drawing, music, language), although each symbol system makes its own unique demands on the child. In developing as symbol users, children separate more clearly symbols and their referents, producers and recipients, and they learn new ways of linking these elements. As Wolf and Gardner (1981) illustrate, there is no reason to assume that young children and adults follow identical rules as they talk, draw, play -- or, I might add, write. Children continually refine their ways of encoding meaning.

Both drawing and writing can be viewed as symbolizing events. When young children combine drawing and writing, they can be referred to as 'symbol weavers', a term coined by Dyson (1982). Recent research into this area reveals the

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significant role that children's drawings play in their development as writers.

If individual differences exist in the way young children use symbols, as suggested by Wolf and Gardner (1979), and both drawing and writing are viewed as symbolizing activities, then how do these individual differences manifest themselves in these separate symbol systems? Can patterns of symbol use in drawing predict patterns of symbol use in writing? Do patterners and dramatists approach the task of writing differently? Are their early written products different?

These questions are the central concerns of this review. The focus is on how young children, aged 2 through 7 years, develop as symbol users. Development in the symbol systems of drawing and of writing are each discussed separately. This is followed by a section entitled 'Children as Symbol Weavers' in which reseach into how young children combine drawing and writing is reviewed. Wolf and Gardner's (1979) theory of preferred styles of symbol use is then described, followed by a section dealing with the question of transfer of symbolic style from drawing, symbolic play and storytelling to more abstract symbol systems such as early writing.

## Drawing as a Symbolizing Activity

In our culture every child draws and, if given the opportunity, nearly every child produces hundreds of appealing drawings during the preschool years. Drawing comes naturally to the child. It begins about the age of two with the discovery that certain substances leave marks on surfaces. These early marks evolve into scribbles, first random and disorganized, but as time goes by become more ordered. Vygotsky (1978) suggests that these early scribbles actually have their origin in the actions and gestures the child uses to indicate meaning, and that they might be viewed as gesturing with pencil.

Kellogg (1970), a widely respected scholar of children's scribbles, determined that there are twenty basic scribbles which a two-year-old makes while free scribbling. Several scribbles overlaid become so complex that they appear to be disorganized. They are not retained in memory by either child or adult. Images that have balanced proportions are most easily recognized and retained in memory. These often occur around three years of age.

Scribbles are thought to be the origin of both drawing and writing (Gardner, 1980). King (1980) stated that: "The outstanding feature of these early attempts with a pencil is that they are more than random marks; they represent children's intentions to create visual constructs and messages" (p.164). Kellogg (1970) and Brittain (1972) view

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young children's scribbling as an accomplishment leading toward a rich heritage of self-expression and warn against adult intervention in the scribbling activity, particularly against adult labeling of scribbles as representations that were never intended by the child.

At about the age of four, children move from the Scribbling Stage to the Preschematic Stage where they make their first representational attempts (Lowenfeld and Brittain, 1987). Here children draw the typical head-feet representation of a person and begin to draw a number of other objects in their environment. These figures or objects appear somewhat randomly placed on the paper and can vary considerably in size. The child has discovered that simple forms can symbolize objects in the real world. He then begins to build a graphic vocabulary in which shapes and lines are combined and modified with great versatility to stand for whatever he wishes (Goodnow, 1977). According to Lowenfeld and Brittain (1987), it is not until the child reaches this stage of making and reproducing symbols at will that he can begin to understand that other people have also made symbols, not only in pictures, but in writing as well.

The next stage is the Schematic Stage, which starts somewhere around seven and lasts until about nine years of age (Lowenfeld and Brittain, 1987). Here children develop a definite form concept. Their drawings symbolize parts of the environment in a descriptive way; children usually

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repeat with some variation the schema that they have
developed for a person again and again.  It is at this time
that one interesting characteristic of children's drawings
appears: children arrange the objects they are portraying in
a straight line.

## Writing as a Symbolizing Event

Vygotsky located the roots of writing development in
the child's growing ability to use varied symbols.   He
described the essence of writing as 'the representation of
meaning by symbolic sign' (1978, p. 114).  Vygotsky
discusses the development of a child's written language in
terms of advancing from first order symbolism to second
order symbolizm to direct symbolism.

First order symbolism was defined as a highly arbitrary
means of representing objects in the environment.  Meaning
is symbolic, but not stationary, nor does representation
allow for consistent interpretation among groups of people.
Gestures, symbolic play, and drawing are first order symbols
because of their highly arbitrary, inconsistent and temporal
constraints.

Second order symbolism is a conventionalized means of
representing words in oral language through written symbols.
Once meaning is assigned to a symbol, it becomes a sign,
maintaining its meaning across time and space.  Ideographic
or rebus writing and alphabetic writing are forms of second

order symbolism.

Direct symbolism is attained when the intermediate link of spoken language disappears. Words on the printed page directly represent concepts, actions, and relationships. With direct symbolism, a conventionalized system of communication, transcending temporal and contextual constraints, is maintained. The ability to use symbols is perhaps the most critical of all abilities the child must develop to be an effective writer. The child must come to see language use in all its manifestations as an abstract symbolizing process. And to do this, the child must first come to grips with the character of symbol -- what it is, how it can be created, and what its uses are. This can be achieved through four different areas: in play, in drawing, in music, and in drama.

As early as age 2 or 3, children begin to differentiate in their scribbles between writing and drawing (DeFord, 1980; Sulzby & Teale, 1985; Woodward, 1988). Between the ages of three and six, children's scribbling gradually acquires the characteristics of print -- including linearity, horizontal orientation, and the arrangement of letterlike forms (Clay, 1975). DeFord (1980) has chronicled the development of uniformity, inner complexity, symmetry, left-to-right motion and top-to-bottom directionality in children's scribbles.

Woodward (1988) analyzed a videotape of one student,

"Eric", age three years, engaged in dialogue with his teacher about a picture he had drawn. In this encounter, Eric actively participated as a maker of meaning and continued to learn about language and the use of other sign systems by using them in a meaningful situation. Eric's art symbols were significantly different than those used for writing. For the young child, learning to write is viewed as a process of gradually differentiating and consolidating these two forms of graphic symbolism. In writing development, drawing is the precursor of pictography, the first graphic expression with the symbolic features closest to the ideographs humans employ in writing. It is crucial to the child's evolving sense of symbol (Klein, 1985). Pictography serves as an important transition from drawing -- representing personal interpretations of reality with pencil or crayon -- to an abbreviated form of drawing that is sort of a shorthand in that what is drawn stands for something other than what is drawn. The child then partials out reality by leaving out critical representational features in the drawing. The drawing then represents rather than presents. The pictograph is a symbol that stands for something greater in both dimension and conception than itself. The child is in the process of summarizing reality on paper by abbreviating with pencil. This is critical for the preschooler. The preschool child must understand that marks on paper can be greater in representational potential

than that from which they derive and, possibly, than that for which they stand.

The pictographic element in children's writing development has not been given much attention in recent studies of early writing. It seems clear that many children do employ a 'pictographic hypothesis' about writing at some point, and that more may be perhaps learned about children's understandings by examining these genuine hypothetical systems.

Luria (1983) set out to look at young children's concepts of writing and their ability to use notation as a tool before they had learned to write. He found that the youngest children (four/five year olds) were generally unable to respond to his requests. They were only interested in "writing like grown-ups" as they tried to copy the form of adult writing; for them the act of writing was not a means of remembering, or representing some meaning, but an act that is sufficient in its own right.

Luria describes the way in which some children discovered in the course of experimental sessions how to use marks on paper as mnemonic signs, sometimes by the use of rudimentary pictographs. Luria was interested in the transition from purely pictographic writing to a more ideographic style of writing which sometimes occurred when experimental subjects were asked to record more abstract ideas. He noted the progression from simple marks which act

as a jog to memory, to pictographs, to more abstract signs.

It would be valuable to have more naturalistic observations of children's use of pictographic signs. James Britton (1983) recalled how, in the beginning, his grand-daughter seemed to hold a topographic hypothesis about writing (the position of marks on the paper recalling their meanings). When, as a 'waitress', she took down orders from Britton in the role of customer, she 'read back' his order according to the arrangement of her marks. From this she moved to a pictographic hypothesis when she 'drew' a letter to a neighbour which depicted five little circles, in a note which meant 'Please buy me some eggs'.

These examples suggest that the younger children were employing a transitional pictograph hypothesis, as they actively explored the nature of the writing system, before they fully understood its alphabetic nature. They needed to learn that, in Vygotsky's words, 'one can draw not only objects but also speech' (1978, p. 115).

Once they get the idea of what can be done in writing, children set about discovering more and more about the process. Attempts to describe young children's writing strategies have revealed a general, but complicated developmental path, moving from lower-appearing forms like scribbling, drawing, and making letter-like forms, to using strings of letters and phonetically based invented spelling, and finally to using regular orthography. The developmental

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patterns have not yet been fully documented, but we can trace some of the forms in a rough chronological sequence, keeping in mind that different children appear to use different developmental paths toward conventional writing.

Sulzby, Barnhart, & Hieshima (1989) conducted a longitudinal study of the forms of writing and rereading that 123 kindergarten children used when asked to write stories. Children from two of the five classes were followed into grade one.

During the first group data collection session, the five major writing forms used by kindergarteners were modeled (scribble, drawing, letter strings, invented spelling, and conventional writing). The children produced eight writing and rereading samples in a group setting in their regular classrooms at approximately monthly interviews. In addition, they produced another three samples in individual interviews conducted quarterly. While the child was writing or immediately afterward, the researcher (or teacher) checked the appropriate boxes on the "Forms of Writing and Rereading" checklist (p. 52, Sulzby, Barnhart, & Hieshima, 1989). The most common forms of writing in October were drawing, scribbling, and random or patterned letter strings. The predominant form of rereading was written monologue. These researchers stressed the need to examine the forms of writing by examining how children reread their writing.

## Children as 'Symbol Weavers'

Many observers have noted that when young children write, they often draw pictures as part of the same activity. Studying the composing behaviors of young children, Graves (1979) found that some 6 and 7-year olds seemed to use drawing as a "rehearsal" for writing, whereas other researchers have suggested that for beginning writers, writing and drawing sometimes function as a single "mixed medium" (Harste, Woodward, & Burke 1984; Gundlach 1982). Dyson (1982) described children as 'symbol weavers'. She believes that the imaginary worlds they form on paper may rely on varied symbol systems or media - drawing, talking, writing.

In his study of children's drawings, Gardner (1980) noted that in some cases in which children combine drawing and writing, the representational role of writing is secondary early in the child's written language development and becomes increasingly dominant as the child becomes a more fluent writer. To demonstrate this point, Gardner reports the case of a child whose drawings were collected by Gertrude Hildreth at Columbia Teacher's College in the 1930s. Hildreth's subject was apparently "obsessed with trains [and] drew many hundred such vehicles over a ten year

period (p.155)." Gardner continues:

> If one looks at the role of writing in these drawings,
> one can observe a subtle yet ultimately decisive
> transition in the depiction of the trains: in the
> preschool years, letters and words were used merely as
> decorations upon the trains; but in the years of
> middle childhood it is the vehicles and tracks that are
> merely decorative, for the major thrust of the
> narrative is now carried by verbal means (p.155).

It seems plausible to suggest that this child built a bridge for himself from the activity of drawing to the activity of writing. He initially used written language to support the functions already served by drawing and then, once he became more adept at handling the forms of written language, in his later combinations of drawing and writing he more fully exploited the narrative potential of language. There is no reason to suppose that this link provided the only bridge to the child's explorations of the possible uses of writing; rather, it seems likely that children make connections of several kinds between various symbol-using activities and the activity of writing (Gundlach, 1982).

A major weakness of Gardners' analyses is that it has been drawn from an "after the fact" perspective. He did not observe the child actually forming these relationships as he drew and wrote; he can only speculate about them afterwards based on the product created. Recent researchers have noted the importance of direct observation of the composing process as a data gathering approach.

Hayes and Cherrington (1985) observed three, four, and five year olds as they engaged in writing activities in their regular classrooms. In addition, the children were asked individually to draw pictures, write about them, read what they had written, and respond to questions guaging their knowledge of written language. This data were examined in terms of Vygotsky's interpretation of writing as symbolic progression. Hayes and Cherrington concluded that children progress in their use of increasingly abstract symbolism to communicate. However, the progression is discontinuous and requires the support of adults who allow them to experiment with the many forms of writing.

Karnowski (1986) also recognized the need for supportive adults to help children connect the function of writing to that of other means of communication. In order to observe young children composing, he set up a writing center in a preschool classroom. He noted that the children, ranging in age from three to five, usually wrote as a very social group of three students at a time. The writing centre was a free choice area and the average time spent at the center was 35 to 40 minutes. Karnowski noted that as the young writers composed, they also used oral language, drawing, music, and drama to increase their communication potential. He concludes that teachers must redefine their ideas about writing and children's communication knowledge.

Hubbard (1987) illustrated the ways children from a first-grade classroom were encouraged to communicate their mental images of movement, spatial concepts, and imagination through drawings and writing. As a resident researcher in the classroom, she observed the children's progress as they wrote, drew, talked about their work, and shared their pieces. She found that the decisions children made about their words and pictures helped their growth and development by providing meaning. She concluded that the relationship between art and writing becomes mutually supportive when children are encouraged to use whatever communication system will work best for them in each particular instance.

Although the findings from Hayes & Cherrington (1985), Karnowski (1986), and Hubbard's (1987) research support each other, the reporting of these studies is incomplete. We do not know much about the children who were observed nor about the regular literacy activities of the classroom. Many questions are left unanswered: how many children were observed; how many writing/drawing samples were collected and by whom; how long did these studies last? If more detailed information were made available to us we could better judge these studies.

A more complete description of methodology is provided by Dyson (1982, 1985a, 1985b, 1986a) who believes that drawing and talking provide children with transitions to writing. She investigated the interrelationships between

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drawings, early writing, and the context of talk in which both phenomena occur. Participant observation methodology was used in a self-contained public school kindergarten in order to gather data daily during a 3-month period. The classroom chosen was naturally-integrated and balanced socially, ethnically, and academically. Of the 22 child participants, ten were female; twelve were male. At the beginning of the study the mean age of the children was 5 years, 7 months. Five children who reflected the classroom's ranges of types of child writers were chosen for case study investigation.

A writing center was established and children freely drew and wrote while Dyson observed and interacted with them to gain insight into their perceptions about these actions. A total of 125 graphic episodes were recorded. Patterns were identified in how the children combined the drawing and writing processes in the promotion of one graphic product and in the manner they used drawing and writing terminology referentially across production modes. On the basis of these patterns, inferences were made about written language development. Learning to write was portrayed as a process of gradually differentiating and consolidating the separate meanings of these two forms of graphic symbolism.

In her second major study in this area, Dyson (1986b) examined the meanings young children express in talk, pictures, and written text, focusing on how children draw

upon all three in one composing event.    Data collection took place an average of twice per week over a five month period (Jan. - May, 1985) in a public school kindergarten.

During the first five-week phase, Dyson observed and interacted with the children, establishing her role as a participant, not as a teacher.    Although all 18 class members were participants in this study, four children were selected as case studies during this initial phase: Jesse, Regina, Christopher, and Reuben.

During the second data collection phase, each child's composing process was observed as they produced their journal entries (picture/text sets).    Collected data included the children's drawn and dictated products, audiotaped recordings of the children's talk while drawing and of their dictations, and observational notes.

The study's findings illustrate how these children used drawing and talk to create imaginary worlds.    At the same time, problems arose for these children as they attempted to transfer those worlds to text.    Individual differences were noted in how children used symbolic media to create their worlds.

Dyson (1988a, 1988b) expanded on this research by continuing to gather data from these students for four months during 1986.    She added two more classes to the sample and under the supervision of the same teacher, "journal time" in three classes   (kindergarten, first/second

grade, and second/third grade in an urban, socially and ethnically diverse school) was investigated. Although approximately 80 students were observed, the study focused closely on eight students, four kindergarteners and four first graders.

Children's talk was audiotaped, observational notes on their behavior were recorded, and all journals were photocopied. Case studies of two of the students illustrate the notion of multiple worlds where writing could appear in the contexts of an imaginary world, a present social world, and a wider experienced world. In these contexts, writing developed as it became a way of understanding their own experiences and of interacting with others. Dyson (1988b) explains:

> When I first began visiting Margaret's room, I did not have this broad perspective, this notion of multiple worlds .... I examined the set of "composing events" compiled for each child. For each composing event I had the child's drawn picture, an audiotape of talk, and the completed written text. I focused only on talk that seemed "task involved" -- directly relevant to the world the child was constructing. (p. 5)

Dyson (1988b) explains further:

> As I continued to follow the children, their relationships with each other grew. And I began to realize that I could not tell the story of any one child's growth as a writer without including the stories of other children as well. The children's imaginary worlds were increasingly embedded within their ongoing social world (p. 6).

Thus, there were now two new kinds of talk to attend to-- talk involving others in one's own world, and talk involving

oneself in other's worlds.

Finally, the children's comments on each other's work led to talk that was task-related--talk about the wider experienced world of people, places, events, and things.

> The children's imaginary worlds were thus increasingly embedded within yet another world. This embedding, too, could lead to clashes, as the children wrestled with how true experiences and personal opinions figured into their "made-up" worlds (Dyson, 1988b, p.6).

Data analysis of the children's talk, pictures, and text illustrated that children invent symbols for figures, objects, and events; engage in the thinking processes of organizing and abstracting as they work to portray their concepts; and communicate their ideas to themselves and others. Dyson (1988a) stresses that both drawing and talk provide children with opportunities to reflect upon, organize, and share experiences. Drawing is important primarily because it helps children plan and organize their dictated or written text. Interest is in developing the ability to communicate a message independently from the pictures. Children need to work to make the visual image and the language cooperate.

## Variation in Symbolic Development

In Werner and Kaplan's (1963) model of symbol use, any symbolic act involves the symbol itself, the symbol's referent, the person producing this symbol, and an intended recipient. With development, these four entities become

increasingly differentiated or distanced from one another
and also linked or integrated in new ways. Building on
Werner and Kaplan's ideas, Wolf and Gardner (1979, p. 127)
point out that, in early symbolic growth, children may
concentrate on different aspects of this symbolic process:
"... each component in the symbolic equation may be
highlighted or neglected; the challenge of symbolization may
be apprehended in diverse ways by different individuals."

As a part of Harvard's Project Zero (a study of early
symbolization), Gardner, Wolf, & Smith (1975, 1982) observed
12 children ranging in age from 2.5 to 5 years and examined
their approach to symbol use. They were drawn at random
from a nursery school that enrolled the offspring of middle-
class families. These youngsters were observed over several
months as they engaged in daily preschool activities and as
they played spontaneously with various media. Each child
was also seen in more "controlled" surroundings by an
experimenter who examined the child's approach and his
responses to a number of experimental demands. Children
worked individually with an observer in a series of
approximately four sessions spread out over no more than a
month.

Because of their interest in the children's performance
with different symbols, and in the range of performance
within a particular symbol system, these tasks varied along
two dimensions. First of all, each child was asked to work

with four separate symbolic media: language (storytelling); symbolic play (acting out a scene with geometric blocks that could "stand for" imaginary characters); two-dimensional depiction (drawing with Magic Markers); and three-dimensional depiction (molding or sculpting with Play Doh). Then, within each of these four media, the child had to perform four tasks: produce a "work". or symbolic product spontaneously; complete a work which, though begun, had been left incomplete by the experimenter; assemble a work out of several parts or segments supplied by the experimenter; and copy or reproduce as faithfully as possible a work or performance exhibited by the experimenter. Usual experimental procedures were employed: sessions were recorded and transcribed; the order of task presentation was counter-balanced across children; and the data was analyzed separately by, and then discussed among, three psychologically trained experimenters until a preliminary consensus on the findings had been reached.

Although cautious about their findings, the researchers did identify complex patterns of individual differences in early symbolic functioning. These intensive observations of individual children have underlined the multifaceted quality of early symbol use.

An intensive longitudinal study of nine first-born, middle-class children (3 males and 6 females) was undertaken to further examine individual capacities in a range of media

areas (Gardner, 1976; Shotwell, Wolf, & Gardner, 1980; Wolf & Gardner, 1979). These children were followed on a regular (weekly or biweekly) basis for five years beginning at the age of one. They were observed by the researchers and their parents as they initially encountered and gradually acquired a mastery of seven separate symbolic media: language (particularly storytelling and metaphor), symbolic play (acting out sequences using objects and language), two-dimensional depiction (drawing), three-dimensional depiction (constructions out of clay and blocks), music, movement (dance), and number. A variety of measures were employed, ranging from standard tests of intelligence and cognition, to researcher-designed tests of symbolic competence, to intensive transcripts of free-play sessions. Observations showed that children displayed patterns of media preference and styles of working that reflected levels of skill with various media.

These findings suggested the existence of "cognitive styles" (Gardner, Wolf, & Smith, 1975, p. 18), or characteristic patterns of behavior in the way children mastered symbolic forms. The initial classification of individual differences was more clearly defined in later studies, and the two labels Patterner and Dramatist were proposed. Wolf and Gardner (1979) described Patterners as children who displayed a strong interest in configurational uses of materials and the making of patterns, structures and

orders. They observed that given materials, such children were more often interested in mechanical and design possibilities than communication or recreation of personal experience. Patterners' complements, labeled "dramatists," manifested an abiding interest in the human surroundings. A considerable portion of these children's energies was devoted toward effective communication with others and toward dramatic sharing of experiences. (p. 124)

Patterners focused on the physical world and their first vocabularies consisted of a high proportion of object names. In painting and block building, they focused on physical aspects of the materials, such as how the paint mixed. Their symbolic activity tended to depend on the physical properties of the symbolic material so that, for instance, a red round shape would be referred to as an "apple". In contrast, "dramatists'" language contained a high proportion of proper names and social expressions. These children tended to use painting and block building to communicate with others. Their symbolic use of painting and blocks did not rely heavily on properties of objects, so a red round shape could be a "person", a "fish", or whatever the child wished.

According to Gardner and his associates, differences in the way young children learn using symbols was a characteristic of growth and development. Their work suggested that certain children used media in a way that

emphasized a "dramatic" or person-centered approach, while others used media in a way that emphasized a "patterned" or object-centered preference.

While observations have been made concerning the role of symbolic functioning in development, and particular approaches to symbolization charted, these views await confirmation. The researchers at Project Zero described a theoretical basis to account for patterns of individual development, yet sufficient empirical evidence to fully substantiate their observations has not been obtained. Their findings were based on a small sample that was studied under atypical conditions. In reporting their findings, they did not indicate the number of children who were categorized as Patterners or Dramatists, nor if any subjects fell between these two categories. Despite these and other limitations, this intensive study of a small group of children has provided a logical point of departure for the study of symbolic development.

Similar differences between more socially-oriented and object-oriented styles have been noted in the area of language development as well, particularly by Nelson (1973) and Peters (1977). For example, Nelson studied the first words of 18 children from approximately 1 to 2 1/2 years of age. The study utilized records kept by mothers as well as tape-recordings of language used by mother and child during monthly visits in the home and periodical probes of such

developments as comprehension, imitation, categorization, and reference. A major outcome of this study was the finding of individual approaches to the tasks of learning the language. These approaches were reflected in a number of ways, first in the kinds of words and phrases children learned and used during the single-word period.

Nelson found that for most of the children, whom she referred to as "referential," early vocabularies consisted largely of object names (nouns) with some verbs, proper names, and adjectives. For a large minority, whom she referred to as "expressive," vocabularies were more varied and included a large proportion of social routines ("Stop it," "I want it."). Nelson's referential children were similar to Wolf and Gardner's patterners, and her expressive children were similar to their dramatists.

In a review of the research on individual differences, particularly in oral language development, Nelson (1981) stresses that most children no doubt fall between the extremes of different styles; further, children may exhibit different styles of using language in different situations. Nonetheless, as she points out, studying children who are extremely different in style does illuminate the nature of the system to be learned.

## Avenues to Later Symbolization

As the world of children enlarges beyond the family-friends circle, children must not only meet new contexts but also learn highly unfamiliar and seemingly arbitrary forms of cultural information. These are discussed by Shotwell, Wolf, & Gardner (1980) as follows:

> Although it is true that normal school-age children share performance skills in patterning and dramatizing, it may be crucial to make the most of their favored means of access as they are asked to become competent users of such cultural forms as texts, maps, and number (p. 194).

As the children in their study came into contact with some of these issues, Shotwell et al. (1980) had the opportunity to observe differences in how they handled both mapping and writing problems. They found that often the children's approaches seemed to be mediated by skills that had already taken root in patterning and dramatizing. By the age of 4, the dramatist's interest in interpersonal roles and narrative sequences, contrasted with the patterner's interest in object attributes, spatial relationships, and symbolic correspondences, culminated in strikingly different forms of emergent mapping skills. Thus, when asked to enact a pretend picnic trip and to later make a map of the trip, children varied as to which task focus was performed most strongly. Julie (the dramatist) entered into the symbolic play sequence confidently and fully, often directing the play herself. Anita (the

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patterner), on the other hand, infrequently took the initiative in imaginary play.

The youngsters' maps also differed. When asked to map the event, Julie's map was cursory:

> She [Julie] draws a jaggedly curved enclosure and then points out the trip's highlights as the Experimenter requests them. Although she apparently has a very general idea of where to place points to represent their actual spatial layout, she only orders them linearly by situating them roughly (but appropriately) from right to left on the enclosure (Shotwell et al., 1980, p. 195).

Anita's map, however, demonstrated a clear and careful concern to reproduce the spatial layout of the trip in graphic form.

> She [Anita] can not only orient points in two-dimensional space, but can also draw the shapes of various objects at the highlight points as well (Shotwell et al., 1980. p.195).

The children seemed to also approach writing issues with characteristically different attitudes, which either reflected or made use of their level of mapping skills and their sylistic concerns. The researchers found that Julie's main interest in writing was initially to be able to sign her name at the bottom of all her pictures. This interest evolved into "endless practicing of her full name, then many hours spent writing all the words she can think to ask her mother to spell out" (p.195). Over a period of months, Julie learned several words that her mother no longer had to spell out letter by letter, These words were learned almost as whole units. Julie did not exploit the correspondence of

letters to sound. Rather, she operated on correspondences between different unit-combinations of letters and events and people. For example, she quickly learned "Carol" for her mother, "Julie" for herself, "Merry Christmas" for the holidays, and "cat" for a picture of a cat. Overall, she seemed primarily to be concerned with the map between the written and the social world of object and person interaction.

Shotwell et al. found that patterners' interest in mapping correspondences and shapes guided their writing concerns in a somewhat different direction:

> In general, there is less reliance on ritualistic practicing of whole words and less interest in the interactional dynamics of having the parent spell out words. Patterners focus first on practicing the individual letter shapes, going on eventually to learn some letter recognition skills, along with simple correspondences between letters and the sounds represented (p.196).

Their interest in writing appeared to stem less from labeling than from discerning and repatterning the structure of spoken words.

Shotwell et al. (1980) conclude that patterners and dramatists highlighted different aspects of writing and mapping abilities in their first encounters with graphic languages. While they stressed that all normal children seem to achieve a pool of complementary stylistic approaches that provide the means of effective symbol use, they felt that it was worth examining the extent to which a child's

original style may persist.

Dyson (1986a) noted in her description of four case study children (Ashley, Rachel, Vivi, and Tracy) that "they appeared to have different ways of approaching written language, approaches that made sense when each child was viewed within the context of their own unique interests and styles of functioning" (p. 211). For example, Tracy wrote words by memorizing letters and their spatial arrangements. Tracy's interests in drawing and in constructive play were to "build" particular entities. Her interest in words as entities was consistent with that drawing and play style.

In contrast, Rachel wrote by requesting words and also by simply putting down letters randomly, despite her awareness that such writing was not "real". However, Rachel wrote for a variety of purposes; she attempted lists of peers, notes to friends, dialogue for her stories. Her interest in the purposes of writing was consistent with her interests as a person. She engaged often in dramatic, imaginative play -- even her drawings took shape within elaborate narrations. Rachel's imaginative narratives, like other informal conversations, generally focused on relationships between people.

Dyson (1986b) found similar variations in further case study analysis. As the observed children drew and talked, they were busy creating imaginary worlds. They built scenes from the cast of characters they had drawn; the characters

were often engaged in actions and, in the latter half of the kindergarten year; increasingly they were located in settings of time and place. Dyson observed that there were:

> ... individual differences in how the children used symbolic media to create their worlds ... the children differed in the degree to which drawing was a "language" activity, that is, in how and how much they made use of talk and drawing and in the relationship between the drawing and talking and the dictated text (p.403).

The documented individual differences in ways of interrelating symbolic media suggest that the support drawing and talk provide for young writers in this activity -- the resources and tensions they create -- will vary for different children. This is indeed what Dyson discovered.

The generalizability of these children's behaviors is limited, in one sense, as the sample is small. Further, the children were chosen as case studies precisely because they had differing approaches to the journal activity. Nonetheless the findings do illustrate differences in how children interrelate symbolic media; these differences are similar to those observed in varied symbolic activities. The research literature thus corroborates and strengthens the descriptions and interpretations of the children's behavior.

## Summary

Researchers have begun to detail ways in which drawing and oral language support each other in young children's development as writers. Table 1 shows the key streams of development that children bring to writing in the early years of schooling. In addition to their linguistic and drawing knowledge, children of course also bring their personal knowledge of the world. While linking writing to oral language, it is not intended to imply the two processes are the same, for writing is surely more than talk written down.

Based on the research discussed here, there appears to be a developmental sequence that characterizes the young child's progression from scribbling to drawing to writing. This supports Vygotsky's theory of symbol use. Children advance in their use of increasingly abstract symbolism. Drawing plays a crucial role in this development.

Pictography is an important transition toward writing. The pictograph is a symbol that stands for something more than what is drawn. This understanding is crucial to the young child's evolving sense of symbol. Children need to be given an opportunity to explore the nature of writing and develop hypotheses for themselves. Young children lean on varied symbol systems in their early attempts at written expression. They often use drawing to visually represent their deas. As they increase in their ability to use words,

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children must work to make the visual image and the language cooperate.

**Table 1:  Resources Children Bring to Written Discourse**

| DEVELOPMENT | ORAL LANGUAGE | WRITING | DRAWING |
|---|---|---|---|
| **0** | (Learning the System) | Gestures | Gestures |
| | Grammar of Functions | | |
| **2 yrs.** | | Scribbles | Scribbling Stage |
| --- | Interpersonal  Ideational | | -disordered |
| **2+** | (dialogue)  (monologue, | Diagonals & | -controlled |
| | self-speech) | Curves | -named |
| | | Letter-like shapes | |
| | Textual | | |
| **4 yrs.** | | Symbol/Signs | Preschematic |
| | | "Messages" | Stage |
| | | | -first representational attempts |
| **---** | School Register | (Words)-Invented | -discovers |
| **5** | (e.g., responses | Spelling | that |
| | to questions) | | simple forms can symbolize objects |
| | | | -builds graphic |
| | Sustained | | |
| | Talk | | |
| **5+** | (explanations, | (groups of words) | vocabulary |
| | narrative) | | |
| **6 yrs.** | | Writing | |
| **---** | Dictated Stories | (labels, lists, | Schematic |
| **7** | | own stories) | Stage |
| | | | -definite form concept |
| | | | -drawings symbolize in a descriptive way |

Adapted from King (1980)

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Researchers at Harvard's Project Zero set out to investigate how young children progress in their development as symbol users. Two major studies, one reported in Gardner, Wolf, & Smith (1975, 1982) and the second reported in Gardner (1976), Shotwell, Wolf & Gardner (1980), and Wolf & Gardner (1979) led to the discovery of complex patterns of individual differences on early symbolic functioning. The existence of "cognitive styles" (Gardner et al., 1975, p. 18), or characteristic patterns of behavior in the way children mastered symbolic forms was suggested. These became labelled as Patterners and Dramatists. Some youngsters directed toward all media what was considered a "patterning approach"; they were concerned with objects and with overall configurations and patterns, they focused on the physical aspects of the media. Others had a complementary "narrative" or "dramatic" emphasis: they treated media as sequential; they were interested in social interactions and in events which unfolded over time.

Similar differences between more socially-oriented and object-oriented styles were discovered in the area of language development (Nelson, 1973; Peters, 1977). Nelson identified one group of children, whom she referred to as "referential", who were similar to Wolf and Gardner's (1979) patterners. A second group of children, similar to Wolf and Gardner's dramatists, were referred to as "expressive".

Nelson (1981) reviewed the research on individual

differences and concluded that most children fall between the extremes of different styles. In addition, children may exhibit different styles in different situations. Yet, she points out that studying children who are extremely different in styles illuminates the nature of the system to be learned.

As young children progress in their use of more abstract symbols, they may approach these new tasks in a manner similar to that used when first encountering simpler symbols systems. Shotwell, Wolf, & Gardner (1980) described how youngsters they were studying approached the tasks of mapping and beginning writing with skills that could be traced back to their earlier patterning or dramatizing behaviors. The children focused on different aspects of the new task, and their products differed considerably. In addition, they approached these new issues with characteristically different attitudes, which reflected their stylistic concerns.

Dyson (1986b) found similar variations in her case study analyses. She observed individual differences in how the children used symbolic media in journal writing tasks. The degree to which they viewed drawing as a "language" activity varied as did the relationship between the drawing, talking, and dictated text.

While most individuals aquire skill in both symbolic approaches -- indeed, everyday interchange requires both

patterning and dramatizing skills -- traces of these

contrasting modes can still be observed at much later stages

of development.  Wolf & Gardner (1979) claim that:

> In our studies of elementary school children we find a
> significant minority who can still be characterized
> reliably as strong patterners or strong dramatists.
> Moreover, even if most of us can adopt either cognitive
> style, it may well be that each individual retains a
> characteristic "strength" or "leading position."  These
> strengths may be particularly manifest when we engage
> in playful activity in which only our impulses are at
> stake or when we confront a new and unfamiliar material
> (p.135, 136).

The extent to which preferred style in the acquisition

of earlier forms of symbolism affect later symbolic

development has, as yet, not been investigated fully.  The

present study attempted to add to the research into this

important area.

# CHAPTER THREE

## Methodology

### Research Design

This study was conducted to examine the relationship between Kindergarten students' preferred symbolic style and their early writing attempts. Their perceptions of the nature of writing and the processes involved in it were also investigated. It was divided into two phases. During phase one the researcher set out to identify case study children who demonstrated a strong, consistent symbolic style when given a variety of tasks to perform using four different symbolic media. The children's drawing, clay modeling, and storytelling products were assessed, as well as their response to a series of symbolic-play tasks using blocks. To obtain measures of symbolic style in these various media, children were required to complete three tasks that included prescribed topics, completion tasks, and free choice.

During phase two the interrelationships between selected case study children's drawing, written text, and talk were examined using two important strategies of qualitative research -participant observation and interviewing (Bogdan and Biklen, 1982). The use of participant observation methodology reflects the study's assumption that composing behavior in any medium is shaped

by individuals with particular intentions and styles of functioning. The aim was to perceive the activity from the child's perspective. Formal and informal interviews were conducted with each focal child to further examine their views on writing.

The data collected included descriptions of the children as they worked in their Journals. Audiotapes, written products, and observational notes were examined.

This qualitative research involved the collection of data over a period of time. As an observing participant, the researcher collected data from a variety of sources which occured naturally in the classroom setting.

As the data were collected, the results were categorized and evaluated on the basis of what had happened to each child. Analysis was on-going and served as a guide to further data collection.

## Site and Program

The project site was a public elementary school in Delta, British Columbia. Research was carried out in one Kindergarten classroom. Children from both the morning and afternoon sessions participated. Both sessions were taught by the same teacher. The classes were heterogeneously formed and diversity in academic achievement was in evidence.

The Kindergarten program involved the use of learning

centres. Centre time occured from 9:30 to 10:15 each morning and 1:00 to 1:45 each afternoon. One of the centres available was the Journal Writing Centre.

## Subjects

The subjects were enrolled in the same Kindergarten class, either in the morning or afternoon session. Twenty-six children participated in the first phase of this study, 13 females and 13 males. At school entry they ranged in age from four years, eleven months to five years, eight months with a mean age of five years, four months.

Twenty-three of the children spoke only English. Three children attended a regular Kindergarten class in the morning and a special Language Enhancement Kindergarten class in the afternoon. The socio-economic status of their families varied from lower to upper middle class status with children living in either single parent, two parent or extended family homes.

Phase two incorporated case studies of six children as they continued in their efforts to acquire skill in written communication. This group contained only English speaking children who ranged in age from five years one month to five years six months with a mean age of five years three months (at the beginning of phase two). It included four girls and two boys. Criteria and method of selection are further described in the data analysis section later in this chapter.

## Data Collection

The data collected was holistic, descriptive data: the children's talk, their products, and observations of their behavior. Data collection took place in both phases. Data collection for phase one occured an average of three times per week for a six-week period (mid October 1990 through November 1990). Phase two data collection occured an average of four times per week for a four-month period (February 1991 through May 1991).

Phase One: Identification Phase. During the first six-week phase, all 26 children were observed during Centre time. Children was assessed to determine their preferred style of symbol use in four separate media: language (story-telling); symbolic play (acting out a scene with geometric blocks that could "stand for" imaginary characters); two-dimensional depiction (drawing with Magic Markers); and three-dimensional depiction (modeling or sculpting with Play-Doh). Within each of these media the child performed three tasks: they produced a symbolic product spontaneously (free choice task); completed a work which, though begun, had been left incomplete by the researcher; and produced a product given a prescribed topic. The various tasks have been summarized below:

1. Drawing. All the drawing tasks were completed on 8 1/2 x 11 inch white paper using colored markers. The children were invited to create a drawing of anything they

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wanted to for the free-choice task. For the completion task the children were given an incomplete drawing of a vehicle and asked to finish it. The third drawing task required the children to produce a drawing of a person.

2. Play-Doh Modelling. Play-Doh was used for the modelling tasks, and the children were also given a set of simple tools. For the free-choice task children were asked to make a model of anything they wanted. The completion task required the children to finish an incomplete figure of an animal. To make a model of a person was the third modelling task.

3. Language (Storytelling). The language tasks were completed in individual sessions with responses and comments being tape recorded. For the free-choice task each child was asked to make up a story of their own. For the completion task the child was told the beginning of a story which began as follows: "Once there was a cat who wanted to be a person. He thought that eating what people ate would help. So every day for lunch this cat had three sandwiches, four kinds of soup, six cookies, two marshmallows, and ten pickles". The child was asked to finish the story. The third task required the child to construct a story that contained specific characters (boy/girl, tiger, and butterfly). The child was given a picture card of each of the prescribed characters to help stimulate response.

4.  <u>Symbolic play using blocks</u>.  Small sets of wooden blocks were used to structure tasks that required the child to respond verbally and to manipulate objects in a form of symbolic play.  For the first task the child was given a set of ambiguously shaped wooden blocks (some of which suggested people, some of which were more conventionally blocklike) and cars.  As a warm-up exercise, the researcher asked the child to imagine what several of the shapes might be.  Then the child was given the entire set of blocks and asked to "pretend whatever you want."  The second task required the child to use imaginery play to complete a problem after being told the beginning of a story and shown the actions using blocks.  The story starts with a "lady" - block in a car, hunting for a parking space along a row of cars.  One car has pulled out of the row so there is an empty space. The researcher then left the story to the child to resolve. The third task required the child to tell a story about a boy/girl, a boat, and a dog and show the actions using the blocks.

Two procedures were used to gather the information. Children were tested in random groups of five for the Play-Doh and drawing tasks.  Media were counterbalanced between groups, as were tasks within each session.  To obtain data on storytelling and symbolic play using blocks, each child was seen individually.  As well as the products created, observation notes, photographs, and video tape

transcriptions helped facilitate scoring procedures.

Although all class members participated in this phase, only six children who demonstrated the most consistent preferred style of symbol use (patterner or dramatist) over all media, were followed into phase two. These children's scores fell within the outer quartiles of the range of scores.

Selected case study subjects were administered the Peabody Picture Vocabulary Test - Revised (PPVT-R), Form L, to check on the similarity between the two groups (Patterners and Dramatists) on receptive language knowledge. Comparisons of approach to writing were made between groups of Patterners and Dramatists.

Phase Two: Research Phase. This phase lasted from February 1991 to the end of May 1991. The purpose of this second phase was to collect data on each case study child's composing process during the production of journal entries (picture/text sets) and on their perceptions of the nature of writing and the processes involved in it. Informal conversations occurred with each case study child as they worked regarding their writing and drawings. These conversations were audio-taped. Children were interviewed individually about their views on writing. Samples of children's written work from across the school year were gathered.

Data were collected four times per week at the journal

writing centre during the regular centre time. Five types
of data were collected: audio recordings of the children's
spontaneous talk at the centre, audio recordings of the
children's responses to the researchers' interventions into
the writing process, handwritten observational notes, the
children's written products, and log entries on perceived
trends in both the writing of the case study children and
that of the class as a whole.

1. <u>Spontaneous talk:</u> During the observational period,
the researcher sat at the writing center with the children.
A tape-recorder was placed either on the floor or on the
edge of the table behind the box containing the children's
papers. A unidirectional microphone was placed in the
middle of the table. It was directed toward the case study
child.

2. <u>Interventions:</u> At certain times during the writing
center observations, the researcher intervened with
questions. An attempt was made to limit interventions in
order to minimize the influence on the children's writing
processes. However, understanding the children's reasoning
sometimes required the posing of questions. The nature of
the questions asked depended upon the particular behaviors
being observed. For example, as the children were drawing
and writing, the researcher asked them to explain their work
or asked them where they got the idea for their piece of
writing.

3. <u>Observational notes:</u> As the case-study child wrote, brief notes were taken on writing behaviors such as the order of production, erasings, use of references materials, sound effects and other literary devices.

4. <u>Written products:</u> The journals were kept in a box near the writing centre. Journals were collected (and photocopies made) so that they could be examined as part of the data analysis.

5. <u>Daily log:</u> Daily entries were made by the researcher in a journal. The entries dealt with the writing trends of both individual case study children and the class as a whole. (See appendix A for an example.)

## Data Analysis

<u>Phase One:</u> Identification Phase

Data gathered during phase one were examined in order to determine each child's approach to the symbolic tasks administered. Field notes, completed products, photographs, and video tapes were examined by the researcher to note patterns of behavior which pointed to Patterner or Dramatist styles. A trained associate (who was an experienced Primary teacher) conducted an independent rating of 24% of the data collected. These two ratings were conducted separately and then compared. The percentage of agreement yielded an overall interrater reliability of .96.

To obtain measures of symbolic style, rating indices

adapted by Sullivan (1986) from Wolf and Gardener's (1979) research were used. Criteria used for determining media responses and a sample of the rating index used are given in Appendix B. A description of characteristic responses made by a Patterner and a Dramatist are also provided in Appendix B.

The tasks utilized to assess symbolic style were analyzed and scored in the following way. The children's responses to each of the assigned tasks were categorized into three areas -- Approach to Task, Use of Language, and Approach to Design. The elements included in each category are as follows:

A.  Approach to Design
      - response to experimental setting (reluctant or enthusiastic)
      - response to task (task-centered or experimenter-centered)

B.  Use of Language
      - amount of language (little or a lot)
      - language/action relationship (separate or simultaneous)
      - language/task relationship (related or unrelated)
      - form of language (descriptive or expressive)

C.  Approach to Design
      - orientation (object-oriented or person-oriented)
      - arrangement based on formal properties or narrative properties
      - emphasis on design or content

Negative numbers were assigned to Patterner-type responses and positive numbers were assigned to Dramatist-type responses. One point (either positive or negative) was given for the inclusion of each element. Ratings were given

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for each task from -10 (Patterner) to +10 (Dramatist)
according to how close the responses came to representing
each style.  An overall symbolic style rating (ranging from
a possible -120 to +120) was computed for each child by
summing the final scores for each of the twelve tasks.

The results of the administration of the twelve
Symbolic Style Tasks in phase one indicated a range of
performance across all of the 26 children tested.  Scores
ranged from -101 to +92 with a median score of +5.  These
results are presented in Figure 1.

**Figure 1**

**<u>Ogive curve of Symbolic Style Scores</u>**
**n=26**

Cumulative
Percentage
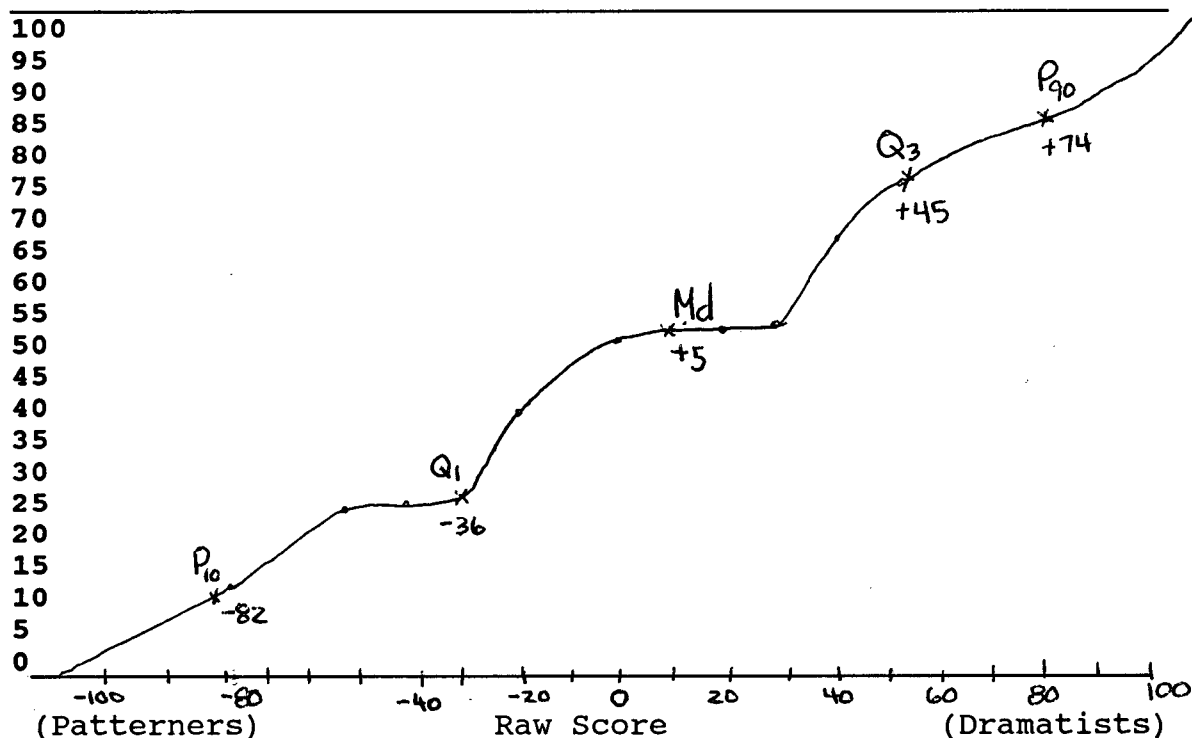
Analysis showed that one-half of the children tested

scored negative numbers indicating Patterner-type responses,

and the other half scored positive numbers indicating

Dramatist-type responses.  Six females and seven males

scored as Patterners, whereas seven females and six males

scored as Dramatists.  The average Patterner score was

-53.7; the average Dramatist score was +52.2.

This distribution of scores is summarized in Figure 2.

This box-and-whisker plot shows the scores divided into

quartiles.  The "box" extends from Q1 to Q3 and defines the

middle 50 percent of the distribution.  From the ogive in

Figure 1, Q1 and Q3 were estimated to be -36 and +45,

respectively.  The vertical line crossing the box at "+5"

defines the median (Q2).

**Figure 2**

<u>**Box-and-whisker plot of Symbolic Style scores**</u>
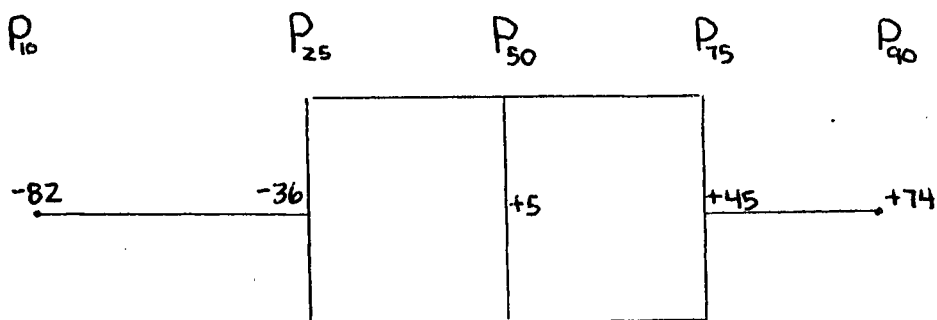


Five children who scored below Q1 and five children who

scored above Q3 were selected for further testing.  These

children represented those whose responses were most consistently within their preferred style (either Patterner or Dramatist). The Peabody Picture Vocabulary Test - Revised (PPVT-R), Form L was administered to these children. A comparison of resulting standard score equivalents (SSE) with Symbolic Style Scores is presented in Table 2.

Given this data, six children were selected to focus on during Phase Two. (Their names have been changed to assure their anonymity.) Caroline, Sammy, and Jillian represented the Dramatist group; Meghan, Donald, and Kathryn the Patterner group.

**Table 2**

Comparison of Symbolic Style Scores and PPVT-R Scores

|  | Symbolic Style Score | PPVT-R score |
|---|---|---|
| *Meghan | -90 | 91 |
| *Donald | -92 | 112 |
| *Kathryn | -101 | 102 |
| Jackie | -71 | 83 |
| David | -75 | 81 |
| *Caroline | +89 | 87 |
| *Sammy | +92 | 115 |
| *Jillian | +75 | 102 |
| Amber | +60 | 115 |
| Michelle | +92 | 154 |

* Children selected as focal children.

Phase Two:   Research Phase

As the data gathering proceeded in phase two, the handwritten notes, transcribed talk, and written products were examined each week in an attempt to determine possible direction for future data collection as well as possible categories for classifying data.

To organize this data, inductive analysis procedures were used.   Inductive analysis procedures involve, first of all, segmenting children's behavior into units; second, comparing like units; and, third, composing descriptors to specify how those units vary.   Both the children's verbal and nonverbal behaviors during writing were of interest.   Therefore, the categories identified referred to both the writing process in general, and the topics and functions of the accompanying talk in particular.   The children's views about writing and the written/drawn products themselves were also examined.   These categories were constantly modified and findings from previous studies informed but did not dictate data analysis.   Analysis was also guided by the research questions which were further refined as the data gathering and analysis proceeded.

The goal of this qualitative analysis was not exact measurement and coding of variables to be statistically related.   Rather, the aim was to develop categories and patterns of behaviors that would allow the comprehensive description and interpretation of observed behaviors.

The first task was to organize the data into units upon which to base the analysis. The basic organizational unit in this study was the composing event. A composing event refers to all the behaviors involved in the production of one journal entry. This refers to a focal child's talking, drawing and composing behaviors.

Writing Process Components: The composing event was the framework for defining aspects or components of the writing process. In an earlier study of young children's emerging writing, Dyson (1985) identified four main components of the writing process. These components were not linear segments, but rather overlapping and recursive aspects of the composing event which could be combined in alternate ways. The four components identified by Dyson (1985, pp. 71, 72) were:

1. Message Formulation: devising the message(s) to be conveyed in print;

2. Message Encoding: using strategies to convert the formulated message(s) into print;

3. Mechanical Formation: physically placing the letters or letter-like forms on paper (i.e., handwriting); and,

4. Message Decoding: using strategies to translate an unknown message which had already been written.

Analysis of the writing process followed these components. Properties were isolated which characterized each component and descriptors were composed to specify distinguishing characteristics. To illustrate, the Message

Formulation component differed in the specificity of the message. There were two alternate child behaviors defining the property of specificity: specifying only the topic of the message, or specifying the exact words contained in the message. Resulting writing process categories, which were adapted from Dyson's (1985) work to describe this set of data, and a copy of the worksheet used to analyze and code these writing process components are provided in Appendix C.

Analysis of Children's Talk: Children's talk became the primary window for understanding the children's approaches to symbolizing experiences and their evolving views about writing. Basic categories of analysis included descriptors for topics, language functions, and meaning elements.

A. Topics of Talk: The topics of the children's talk were examined and compared, noting their distinguishing characteristics. Differences were noted in the degree of relevancy of the children's talk to their ongoing journal activity. The following topic categories (adapted from Dyson, 1989, pp. 287, 289) describe these differences.

1. Task-involved talk is directly relevant to the child's own ongoing journal entry. Variations were noted in the degree of symbolic involvement in the task. The child might: focus on their own feelings and actions; focus on the actions or state of the depicted figures and events;

differentiate between the depicted figures and events and the imagined figures or events to be rendered; or focus on the symbolic vehicle itself, separate from the imagined or depicted experience. Variations were also noted in the nature of the time frame created. A child might create a static time frame in which the depicted figures do not move through time or a dynamic time frame in which the depicted figures do move through time.

2. Other's-task-involved talk is directly relevant to a peer's composing event. The child's talk can be coded for degree of symbolic involvement and nature of the time frame governing that talk.

3. Talk involving other in one's own talk is focused on both the child's ongoing task and on another child. This talk could also be coded for degree of symbolic involvement and the nature of the time frame governing that talk.

4. Task-related talk is talk which is clearly related to the child's ongoing work. Talk may be thematically related or use the referent category of the objects or events being depicted.

5. Nontask-invloved talk is talk which doesn't fall into any of the preceding categories.

      B.   Language Functions:  The children's utterances were compared in order to identify the range of functions for which they used talk. Their spontaneous talk was categorized, basing the initial category system on the work

of Dyson (1985, 1989). These functions were modified, deleted, and added to in order to accurately describe the collected data. The resulting classification system has five major functions with accompanying strategies. (See Appendix C for a detailed description of this classification system.) In brief, the children used language to represent real and imaginary situations (referred to as representational language); to monitor and direct their own behavior, including their drawing and writing behaviors (directive language); to seek information (heuristic language); to express their feelings and attitudes (personal language); and to manage social relationships (interactional language). (The labels used for these functional categories were based on those by Halliday, 1973.)

C. Meaning Elements: This described the meanings the children expressed not only in their talk, but also in their drawings and in their written products. In formulating the meaning elements categories, Dyson's (1989) work was again influential. The following categories were identified: objects, actors, actions, placement in time (past, present, future) and space (location), and sensorimotor qualities (direction, force, speed, volume). For each observed composing event, the meaning elements contained in the child's drawing, talking, and composing were compared. Figure 4 in Appendix C illustrates the worksheet used to record this analysis.

Analysis of Writing Interview Responses:  The children's responses to the structured interview questions were examined to note possible similarities and/or differences in each groups' views of the nature of writing and the processes involved in it.

Product Analysis:  All of the products collected were analyzed in order to: determine how the children combined drawing and writing in the production of one graphic episode; to discover what stance the children took as authors, and; to assess whether or not these texts contained evidence of narrative movement.

A.  How writing and drawing were combined: Analysis was carried out to determine how the children used drawing and writing.  Composing events were organized into categories in which the children combined drawing and writing in similar ways.  Findings from Dyson's (1982) earlier work influenced the descriptors used to specify the distinguishing characteristics of each category.  The following four categories resulted from examining the collected products:  1) Drawing and writing contributed roughly equally to the complete product; 2) Writing served as a label for at least part of the drawn graphics; 3) Writing was part of the drawn graphic, and; 4) Drawing provided the meaningful context for the writing - it was not simply an illustration of the writing.

B.   Personal Stance in Children's Texts:

Examination of the children's texts indicated that a child

author might assume any of three roles:   commentator,

observer, and/or actor.   The role of commentator involved

the child describing his pictures using phrases such as

"This little girl" and/or progressive verbs ("is jumping").

This resulted in products which Dyson (1989) labelled "art

notes".   At other times, the child might assume the role of

observer of the events and things within the text itself.

This stance was reflected in third-person construction of

the text.   A child might also assume the role of actor

within the text.   This stance was reflected in the use of

the first-person pronoun, I.   Finally, a child author might

appear to change stances abruptly:   such texts were

classified as shifting between different stances.

C.   Narrative Movement:   As defined previously,

narrative movement existed if there were two or more

temporally ordered, independent clauses presenting action or

a character's reaction.   The following is an example:

                    The bird
          One day there was a little girl who catched a
          bird.  And she wouldn't let it go.  She put it on
          her dresser but it falled.  The bird got out of
          the cage.  And it flied around.  And it got out by
          the window.

Texts could also imply movement, although that movement

was not actually accomplished, as in the following text:

          There was a tree.  It was waiting for a animal to
          go in it and there was food in it.

Each text was examined for evidence of narrative movement, no narrative movement or implied narrative movement.

# CHAPTER FOUR

## Results

### Introduction

Results are organized for presentation into three main sections - Product Analyses, Composing Process Analyses, and Writing Interview Analysis. Within each section, comparisons are shown between Patterners (P) and Dramatists (D). The first section presents the findings from the examination of the written/drawn products. This includes how the children combined drawing and writing, what personal stance was evident in their written products, and analysis of narrative movement in their texts.

The second section presents those findings pertaining to analysis of the composing process. Analysis of the writing process components data as well as analysis of the children's talk (examining topics, language functions, and meaning elements) are reported.

Findings gathered through the writing interviews are presented in the third section. Summaries of results from Product and Process analysis are given at the end of this chapter.

### Product Analyses

By the end of the data collection period, approximately 20 hours of audiotaped data and 107 journal entries produced

by the focal children had been collected.  Conventions used in the presentation of transcripts are provided in Appendix D.  Table 3 shows the number of journal entries collected for each child, divided into those which were dictated, those written independently, and those constructed through a combination of dictation and independent writing.  The average number of words contained in each child's written texts is also shown.

**Table 3**

Number of Journal Entries Collected and
Average Number of Words per Entry

|  | Number of Entries | | | Average Number of Words |
|---|---|---|---|---|
|  | Dictated | Own | Combo. |  |
| Dramatists: | | | | |
| Jillian | 5 | 9 | 1 | 33.7 |
| Caroline | 9 | 7 | 0 | 32.5 |
| Sammy | 7 | 12 | 3 | 15.4 |
| Totals: | 21 + | 28 + | 4 = 53 | 27.2 |
| Patterners: | | | | |
| Kathryn | 8 | 2 | 7 | 28.0 |
| Donald | 14 | 2 | 1 | 8.5 |
| Meghan | 8 | 11 | 1 | 12.0 |
| Totals: | 30 + | 15 + | 9 = 54 | 19.4 |

## How drawing and writing were combined

What role did drawing and writing serve in one graphic product? Are there differences in the way Patterners and Dramatist combine drawing and writing? These two questions were posed in Chapter 1. To address these issues, all journal entries collected were examined to determine the observed relationships between the drawing and writing processes. The results of this analysis are presented in Table 4. This table illustrates that the most prevalent type of written product produced by both Dramatists and Patterners was category D in which the drawing provided a meaningful context for the writing. Examples of products from each of these categories are shown in Appendix E.

**Table 4**

**How Writing and Drawing were Combined**

| Product Type | Dramatists % | Dramatists No. | Patterners % | Patterners No. |
|---|---|---|---|---|
| A. Drawing and writing contributed (roughly) equally to the complete product | 28 | 15 | 20 | 11 |
| B. Writing served as a label for at least part of the drawn graphics. | 25 | 13 | 28 | 15 |
| C. Writing was part of the drawn graphics. | 4 | 2 | 0 | 0 |
| D. Drawing provided the meaningful context for the writing; it was not simply an illustration of the writing. | 43 | 23 | 52 | 28 |

## Personal stance in children's texts

As described in Chapter 3, the observed children appeared to take various stances as authors. These stances ranged from commentator, in which the children described their picture, to observer (reflected in the use of third-person construction of text), to actor, in which the children themselves were involved in the text (reflected in the use of the first-person pronoun I). To determine if Patterners and Dramatists assumed different stances, each product collected was examined to note what role these child authors were assuming through their texts. Table 5 presents the results of this analysis.

Table 5 illustrates that the roles of commentator and observer were most common among both the Dramatist and Patterner groups. The role of actor was the least observed stance. Some shifting between stances was noted for each of the children. At first glance it appears that generally the observer stance was preferred by the Dramatists and the commentator stance was preferred by the Patterners. However, closer examination reveals that although both Sammy and Jillian assumed the observer stance most often, Caroline (a fellow Dramatist) appeared to prefer the role of commentator best. In addition, Kathryn did not fit in with the other Patterners. She only demonstrated use of the commentator stance twice compared with Donald's eight and Meghan's 13 times. Eighty-two percent of her texts were

written from an observer stance.


**Table 5**

**Personal Stance in Children's Texts**

| Child | Commentator | | Observer | | Actor | | Commentator/ Observer | | Commentator/ Actor | |
|---|---|---|---|---|---|---|---|---|---|---|
| | % | No. | % | No. | % | No. | % | No. | % | No. |
| Dramatists: | | | | | | | | | | |
| Sammy | 43 | 10 | 48 | 11 | 0 | 0 | 9 | 2 | 0 | 0 |
| Caroline | 50 | 8 | 31 | 5 | 6 | 1 | 13 | 2 | 0 | 0 |
| Jillian | 13 | 2 | 74 | 11 | 13 | 2 | 0 | 0 | 0 | 0 |
| Totals: | 37 | 20 | 50 | 27 | 6 | 3 | 7 | 4 | 0 | 0 |
| Patterners: | | | | | | | | | | |
| Donald | 76 | 13 | 6 | 1 | 12 | 2 | 6 | 1 | 0 | 0 |
| Meghan | 40 | 8 | 25 | 5 | 10 | 2 | 20 | 4 | 5 | 1 |
| Kathryn | 12 | 2 | 82 | 14 | 0 | 0 | 0 | 0 | 6 | 1 |
| Totals: | 43 | 23 | 37 | 20 | 7 | 4 | 9 | 5 | 4 | 2 |
| Overall Totals: | 40 | 43 | 44 | 47 | 6 | 7 | 8 | 9 | 2 | 2 |


**Narrative movement in children's texts**

Findings confirmed that the children used narrative
time in different ways within their texts. The results of
analyzing the products for evidence of movement are

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presented in Table 6. This analysis indicated that half of the collected products did not contain narrative movement and half either implied or actually contained movement.

Differences were evident in the amount of narrative movement included in texts written by Dramatists and Patterners. Patterners either used or implied movement in 59% of their texts, whereas Dramatists only included or implied movement in their texts 41% of the time.

Table 6

**Presence of Movement in Children's Texts**

| Child | No Movement | | Implied Movement | | Movement | |
|-------|------|------|------|------|------|------|
| | % | No. | % | No. | % | No. |
| Dramatists: | | | | | | |
| Sammy | 61 | 14 | 17 | 4 | 22 | 5 |
| Caroline | 56 | 9 | 19 | 3 | 25 | 4 |
| Jillian | 60 | 9 | 0 | 0 | 40 | 6 |
| Totals: | 59 | 32 | 13 | 7 | 28 | 15 |
| Patterners: | | | | | | |
| Donald | 47 | 8 | 18 | 3 | 35 | 6 |
| Meghan | 45 | 9 | 20 | 4 | 35 | 7 |
| Kathryn | 29 | 5 | 18 | 3 | 53 | 9 |
| Totals: | 41 | 22 | 18 | 10 | 41 | 22 |
| Overall Totals: | 50 | 54 | 16 | 17 | 34 | 37 |

# Composing Process Analyses

## Writing Process Analysis

Analyses of writing behaviors were undertaken to determine similarities or differences between Patterners(P) and Dramatists (D) in terms of message quality (the child's control over the message to be expressed and the system used for expressing that message). The four components of the writing process were examined for each group.

A.   Message Formulation

When formulating their messages, the Patterners observed tended to specify only the topic of their message but not the actual wording of that message. Dramatists, on the other hand, did specify exact wording during a few (16%) of their journal writing sessions. However, the majority of the time only topics were specified by both groups.

Although all the messages were in some way related to the graphics on the page, the level of coherance varied between the two groups. For the Dramatists, only 58% of the time did the entire product produce a coherant whole. The remainder of the time the messages appeared only somewhat related to the graphics produced. Cohesiveness between the graphics and the written messages appeared to be more important to the Patterners observed. Eighty-four percent

of the time these two components went together to form a cohesive whole.

Analysis revealed that the level of linguistic organization ranged from single words to groups of two or more sentences.  The Dramatists wrote messages of two or more sentences 72% of the time.  The remainder of their entries were simple sentences or one-word labels.  The Patterners' texts fell (roughly) equally into either single or multiple sentence lengths.


B.  Message Encoding

Segmenting the oral message during encoding was much more common among the Patterners than the Dramatists. Patterners segmented the oral message into phrases, words, syllables or sounds 84% of the time.  This is high compared to only 45% for the Dramatists.   A breakdown of these results is presented in Table 7.

A combination of systematic and nonsystematic procedures were used by the children when encoding their message segments.  Adult-dependent encoding procedures were regularly used by both groups to request spellings (particularly at the beginning of the observational period). For Patterners, this strategy was used frequently to obtain object labels.  The labels requested were typically for well-known objects and/or objects in the immediate environment.  On a number of occasions Donald (P) went

beyond simply requesting the spelling of words to actually
guiding the adult's recording of these words in a specific
way. This request procedure is illustrated in the following
excerpt:

> Donald:     I need a new word.  How do you spell
>             blocks?
>             (Donald was directing his request to me.)
>
> Mrs. S.:    Okay, just hand me the felt pen
>             and your word cards --
>
> Donald:     -- I want to use two colors.  A pattern!
>             I want a pattern!
>             (Donald gave me two felt pens instead of
>             the usual one.)
>
> Mrs. S.:    Okay.
>
> Donald:     Blue, red, blue, red, blue, red.
>             (Donald seemed more concerned with creating a
>             pattern than with his original request for
>             the word blocks.)

**Table 7**

Segmentation of Oral Language During Encoding

| Type of Segmentation | Dramatists % | No. | Patterners % | No. |
|---|---|---|---|---|
| Not applicable (one word message) | 1.5 | 2 | 0 | 0 |
| No segmentation existed | 53.5 | 73 | 16 | 22 |
| Segmented into phrases | 30 | 40 | 37 | 51 |
| Segmented into words | 9 | 12 | 26.5 | 36 |
| Segmented into syllables | 1 | 1 | 9.5 | 13 |
| Segmented into sounds | 5 | 7 | 11 | 15 |

Among the Dramatists, requests for spellings were also made to both adults and peers. But unlike Patterners, Dramatists often had specific, personal reasons for the words they requested. The following excerpts are illustrative:

> *How do you write [last name]? 'Cause I want to write my last name.
> *How do you spell Edmonton? That's where my cousin lives.
> *I need the name Lila. 'Cause I don't know and that's my Auntie's name. I want this mermaid to be Lila.

A variety of systematized, orthographic procedures were used by the children to encode their messages independently. Sammy and Jillian (both Dramatists) used a letter-name strategy when writing independently. This is illustrated in Sammy's bird story shown in Figure 3. In this example, he used the letter Y for the word "why" and the letter U for the word "you". His story reads, "Why do you quack?".

The use of a personal or conventional system of sound/symbol correspondences was the most frequently used strategy by the Dramatists. Patterners also used this strategy, but not as often. Spellings were also based on visual recall. By the end of phase two Jillian (D), Sammy (D), and Meghan (P) were spelling many words independently. On the other hand, Caroline (D), Donald (P), and Kathryn (P) wrote very few words using this strategy. Word lists and environmental print were used as references by both groups.

**Figure 3**

<u>Sammy's bird story</u>



C.  Mechanical Formation

Conventional use of symbols was consistent among each of the children observed.  Letters were used in almost all of the written products.  The use of letter-like forms was only evident in a few instances.  All letters were produced as unconnected symbols and most were produced fluently. Spatial arrangement (including directional pattern and

spacing of texts) varied only slightly between the two groups. Both Dramatists' and Patterners' texts showed conventional directional patterns and some use of spaces between words. In addition, two of Meghan's (P) texts which were quite extensive did not contain any unconventional arrangements or spacing of text. She wrote in a conventional directional pattern and left spacing between words.

D. Message Decoding

Fewer instances of decoding were observed than were instances of message formulation and encoding. Among the Patterner group, Meghan reread many of her journal entries without segmenting the written message. She appeared to base decoding on visual recall of words and used a conventional system of sound/symbol correspondences to "sound out" unknown words. It should be noted that she also read other texts (books, charts) independently. Neither Donald (P) nor Kathryn (P) were observed decoding their messages independently. They relied on the teacher to reread their journal entries.

Based on this limited data, it was noted that Sammy (D) and Jillian (D) segmented the written message into phrases about 20% of the time. They used the following strategies to decode their messages: situational context; a letter-name strategy; a personal or conventional system of

sound/symbol correspondences, and; visual recall of the word. Like Donald (P) and Kathryn (P), Caroline (D) relied on someone else to decode her written messages.

## Analysis of Children's Talk

Three questions were posed in regards to the children's talk: What topics are evident in the children's talk and how relevant is this talk to the ongoing journal activity?; What role does language play in each groups' approach to writing?; What meaning elements are contained in their talking, drawing, and composing? The children's talk was examined in these three areas and results from this analysis are reported in this section.

This analysis was based on the transcription of audio tapes of the children's talk as they worked at the journal writing centre. The unit of analysis of children's talk was an utterance (a phrase or idea unit). The amount of talk which occurred varied between groups and among individual children. The average number of utterances per composing event for the Dramatists was 32 with a range of 24 to 40. Patterners averaged 21 utterances per composing event with a range of from 10 to 39. Sammy (D) spoke slightly less and Donald (P) more than the other members of their group.

1. <u>Topics of Talk</u>

Examination of the topics of the focal children's talk revealed some differences in the degree of relevancy of the children's talk to their ongoing journal activity. Five major topics related to relevancy were identified:

      A.    Task- involved Talk
      B.    Other's-task-involved talk
      C.    Talk involving others in one's own task
      D.    Task-related talk
      E.    Non task-related/non task-involved talk

Percentages of talk which fell into each of these topics (see Chapter three for description and examples) were calculated. Variations were discovered within some of these topics and the percentage of talk which fell into each sub-category (variation) was also calculated. The results of this analysis are shown in Tables 8 and 9. Since the amount of talk differed from child to child, percentages are reported rather than the actual number of utterances.

**Table 8**

**Topics of Dramatists' Talk**

| * Topics / *Children | A S | A C | A J | B S | B C | B J | C S | C C | C J | D S | D C | D J | E S | E C | E J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Overall percentages** | 46 | 59 | 68 | 17 | 13 | 7 | 4 | 7 | 8 | 8 | 2 | 7 | 25 | 19 | 10 |
| **Degree of symbolic involvement** | | | | | | | | | | | | | | | |
| i) focus on own feelings/actions | 18 | 16 | 21 | 21 | 32 | 50 | 50 | 46 | 13 | | | | | | |
| ii) focus on actions of figures/events | 44 | 48 | 32 | 31 | 28 | 21 | 17 | 15 | 0 | | | | | | |
| iii) differentiatie between depicted and imagined figures/events | 0 | 3 | 2 | 7 | 8 | 0 | 0 | 0 | 0 | | | | | | |
| iv) focus on symbolic vehicle | 30 | 26 | 39 | 41 | 32 | 29 | 33 | 39 | 87 | | | | | | |
| **Nature of time frame created** | | | | | | | | | | | | | | | |
| i) static | 5 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| ii) dynamic | 3 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| **Thematically related** | | | | | | | | | | 64 | 75 | 20 | | | |
| **Use of referent category** | | | | | | | | | | 36 | 25 | 80 | | | |

* Topics:
    A. Task-involved talk
    B. Other's-task-involved talk
    C. Talk involving others in one's own task
    D. Task-related talk
    E. Non task-related/non task-involved talk

* S=Sammy; C=Caroline; J=Jillian

# Table 9

## Topics of Patterners' Talk

| * Topics | A | | | B | | | C | | | D | | | E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Children** | D | M | K | D | M | K | D | M | K | D | M | K | D | M | K |
| **Overall percentage** | 56 | 73 | 80 | 18 | 5 | 5 | 16 | 0 | 2 | 3 | 2 | 2 | 7 | 20 | 7 |
| **Degree of symbolic involvement** | | | | | | | | | | | | | | | |
| i) focus on own feelings/actions | 36 | 10 | 7 | 26 | 99 | 20 | 41 | 0 | 33 | | | | | | |
| ii) focus on actions of figures/events | 20 | 45 | 54 | 36 | 1 | 0 | 6 | 0 | 0 | | | | | | |
| iii) differentiate between depicted and imagined figures/events | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| iv) focus on symbolic vehicle | 41 | 35 | 30 | 36 | 0 | 80 | 53 | 0 | 67 | | | | | | |
| **Nature of time frame created** | | | | | | | | | | | | | | | |
| i) static | 1 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| ii) dynamic | 2 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | |
| **Thematically related** | | | | | | | | | | 17 | 1 | 50 | | | |
| **Use of referent category** | | | | | | | | | | 83 | 99 | 50 | | | |

*Topics:
   A. Task-involved talk
   B. Other's-task-involved talk
   C. Talk involving others in one's own task
   D. Task-related talk
   E. Non task-related/non task-involved talk

** D=Donald; M=Meghan; K=Kathryn

Data revealed that the most of the children's talk was task-involved. For Dramatists this amount was slightly lower (60%) than for Patterners (65%). An average of 12% of both groups' talk was perceived as directly relevant to a peer's composing event (other's-task-involved talk). The percentage of talk involving others in one's own task was somewhat lower: 6% for Dramatists; 11% for Patterners.

The percentage of Task-related talk was similar for both groups: 4% for Dramatists; 3% for Patterners. Yet, when divided into thematically related talk versus talk which used the referent category of the objects or events being depicted, differences were noted. Dramatists talked more (64%) about thematically related experiences than Patterners (only 17%). In addition, Patterners used the referent category more often in their task-related talk than Dramatists (83% vs. 36%).

Data analysis revealed that Dramatists engaged in twice as much non task-involved, non task-related talk than Patterners. This is talk which was perceived as not falling within any of the other categories.

Further anlaysis of this data was undertaken to investigate possible differences between Patterners and Dramatists in the degree of symbolic involvement in the task. All talk falling within the first three categories (task-involved talk, other's-task-involved talk, and talk involving others in one's own task) was examined to identify

the focus.  Table 10 shows the results of this analysis.

Given this breakdown of data, it appears that (overall) the Dramatists talked most often about the actions or state of the depicted figures and events whereas the Patterners talked most often about the symbolic vehicle itself.  However, the percentages did not vary considerably in these areas.  Similarities were noted in the focus on one's own feelings and actions.  Differentiating between depicted and imagined figures and events was the least evident focus of the children's talk.

**Table 10**

**Degree of Symbolic Involvement in Children's Texts**

| Focus of Talk | Dramatists | | | | | | Total | | Patterners | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | S | | C | | J | | | | D | | M | | K | | | |
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| Focus on own actions /feelings | 24 | 22 | 31 | 22 | 38 | 24 | 93 | 23 | 68 | 36 | 5 | 18 | 8 | 10 | 81 | 27 |
| Focus on actions or state of depicted figures & events | 45 | 40 | 61 | 44 | 46 | 30 | 152 | 38 | 40 | 21 | 13 | 46 | 42 | 52 | 95 | 32 |
| Differ-entiate between depicted & imagined figures & events | 2 | 2 | 5 | 4 | 2 | 2 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Focus on symbolic vehicle | 38 | 36 | 42 | 30 | 71 | 45 | 151 | 37 | 82 | 43 | 10 | 36 | 31 | 38 | 123 | 41 |

2.  Language Functions

The children's utterances were compared in order to determine the range of functions for which these children used talk.  The resulting classification system was two-tiered, with five major functions and the accompanying strategies used to effect each.  The percentage of talk which fell into each of these categories was calculated.  Table 11 shows the results of this analysis.

**Table 11**

Language Functions of Children's Texts (by percentage)

| Child | Rep. Lang. | Direct. Lang. | Heuristic Lang. | Personal Lang. | Interact. Lang. |
|---|---|---|---|---|---|
| Dramatists: | | | | | |
| Sammy | 37 | 41 | 10 | 8 | 4 |
| Caroline | 27 | 52 | 6 | 11 | 3 |
| Jillian | 12 | 69 | 10 | 7 | 2 |
| Totals: | 24 | 56 | 9 | 9 | 2 |
| Patterners: | | | | | |
| Donald | 20 | 50 | 10 | 13 | 5 |
| Meghan | 30 | 55 | 2 | 7 | 7 |
| Kathryn | 4 | 85 | 2 | 7 | 1 |
| Totals: | 18 | 60 | 7 | 11 | 4 |
| Overall Totals: | 21 | 57 | 8 | 10 | 3 |

Language which served to direct the actions of self and/or others was the most frequently used. This was followed by representational language, then personal, heuristic, and finally interactional language. This ranked order of results was the same for both Patterners and Dramatists.

Various strategies were used within each of these functions. Table 12 shows the strategies used within the representational and directive functions. It can be interpreted as follows: Representational language represented 37% of Sammy's language (as shown in Table 11). Of this, 13% involved labeling, 18% involved elaborating or detailing, 62% was reporting, 5% was narrating, and the remaining 2% was reasoning.

Those strategies used within the Heuristic and Personal language functions are presented in Table 13. These scores represent the percentage of use within each function and may be interpreted as was Table 12. No division into strategies was made in the Interactional language function.

In most instances Patterners and Dramatists used talk to serve similar functions. Their strategy use was similar as well. One interesting difference can be seen by examining Table 13 and noting the Personal Language strategies. Dramatists engaged in about three times more playful language use than Patterners. Patterners' personal language use was more self-evaluative than Dramatists'.

**Table 12**

<u>Representational and Directive Language Strategies Used</u>

| <u>Strategies</u> | <u>Dramatists</u> | | | <u>Patterners</u> | | |
|---|---|---|---|---|---|---|
| | *<u>S</u> | <u>C</u> | <u>J</u> | **<u>D</u> | <u>M</u> | <u>K</u> |
| <u>Representational</u> <u>Language</u> | | | | | | |
| a) Labeling | 13 | 14 | 18 | 25 | 0 | 0 |
| b) Elaborating | 18 | 12 | 14 | 18 | 28 | 0 |
| c) Reporting | 62 | 63 | 54 | 52 | 57 | 100 |
| d) Narrating | 5 | 2 | 0 | 2 | 0 | 0 |
| e) Dramatizing | 0 | 0 | 0 | 0 | 0 | 0 |
| f) Reasoning | 2 | 9 | 14 | 3 | 15 | 0 |
| <u>Directive</u> <u>Language</u> | | | | | | |
| a) Monitoring | 0 | 2 | 0 | 2 | 0 | 0 |
| b) Planning | 25 | 25 | 31 | 36 | 19 | 27 |
| c) Encoding | 24 | 53 | 44 | 23 | 54 | 63 |
| d) Decoding | 19 | 4 | 15 | 6 | 15 | 6 |
| e) Accessing | 12 | 2 | 3 | 1 | 0 | 1 |
| f) Instructing | 1 | 4 | 1 | 6 | 4 | 0 |
| g) Requesting | 18 | 8 | 5 | 23 | 8 | 3 |
| h) Offering | 1 | 2 | 1 | 3 | 0 | 0 |

* S=Sammy, J=Jillian, C=Caroline
** D=Donald, M=Meghan, K=Kathryn

**Table 13**

**Heuristic and Personal Language Strategies Used**

| Strategies | Dramatists | | | Patterners | | |
|---|---|---|---|---|---|---|
| | *S | C | J | **D | M | K |
| **Heuristic Language** | | | | | | |
| a) Seeking confirmation | 50 | 50 | 72 | 28 | 0 | 100 |
| b) Seeking fact | 50 | 50 | 24 | 69 | 100 | 0 |
| c) Seeking demonstration | 0 | 0 | 4 | 3 | 0 | 0 |
| **Personal Language** | | | | | | |
| a) Evaluating others | 7 | 35 | 29 | 15 | 67 | 12 |
| b) Evaluating self | 36 | 35 | 29 | 75 | 33 | 63 |
| c) Playing with language | 57 | 30 | 42 | 10 | 0 | 25 |

\* S=Sammy, J=Jillian, C=Caroline
\*\* D=Donald, M=Meghan, K=Kathryn

3. Meaning Elements

The final analysis of the children's talk involved an investigation of meaning elements. Meaning elements (those components through which meanings are expressed) evident in three mediums (talk, drawing, and writing) were compared to find answers to the following questions. (1) In what medium were meaning elements most evident? (2) Within each medium, which meaning element was expressed most often?

In relation to this first question, data analysis revealed that the highest percentage of meaning elements were evident in the children's talk (40% for Patterners, 43% for Dramatists). This was followed by writing (36% for Patterners and Dramatists) and, finally, drawing (24% for Patterners, 21% for Dramatists). Table 14 presents the results of analysis of data relating to the second question posed. Amounts are given in percentages so that comparisons could be made between Patterners and Dramatists.

**Table 14**

<u>**Meaning Elements Contained in Talk, Drawing and Writing**</u>

<table>
<tr><td colspan="11" align="center">Meaning Elements</td></tr>
<tr><td>Medium</td><td colspan="2">Sensorimotor Qualities</td><td colspan="2">Time/ Space</td><td colspan="2">Objects</td><td colspan="2">Actors</td><td colspan="2">Actions</td></tr>
<tr><td>Talk</td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td></tr>
<tr><td></td><td>1</td><td>1</td><td>18</td><td>15</td><td>25</td><td>24</td><td>22</td><td>26</td><td>34</td><td>34</td></tr>
<tr><td>Drawing</td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td></tr>
<tr><td></td><td>0</td><td>2</td><td>0</td><td>0</td><td>55</td><td>59</td><td>29</td><td>34</td><td>16</td><td>5</td></tr>
<tr><td>Writing</td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td><td><u>P</u></td><td><u>D</u></td></tr>
<tr><td></td><td>0</td><td>0</td><td>16</td><td>16</td><td>19</td><td>22</td><td>23</td><td>25</td><td>42</td><td>37</td></tr>
</table>

Within the medium of talk, Patterners' expressed meanings were mostly related to actions. This was followed by talk related to objects, actors, time/space, and sensorimotor qualities. Like Patterners, Dramatists talked mostly about actions. Their second most common meaning element

expressed through talk was actors, followed by objects, time/space, and sensori-motor qualities (direction, force, speed, volume).

Within the medium of drawing, both groups focused most on objects, followed by actors and actions. Dramatists also expressed a small amount of meaning related to sensori-motor qualities in their drawings.

The third medium examined was the children's writing. Once again, both groups demonstrated similar patterns of focus. Actions were expressed most frequently in writing, followed by information regarding actors, objects and time/space.

## Writing Interview Results

As was expected, the Dramatists spoke more fluently about their views of writing than did the Patterners. Each groups' responses to the questions asked were as follows:

| Interview Question | Responses | |
|---|---|---|
| | Dramatists | Patterners |
| When you are writing and you come to something that is difficult or hard, what do you do? | (S) I just try to do it right. I learned to spell words by the sounds. (J) I think very, very hard. (J) I erase it. (C) I go and look around the room and see if I can find any words or I look in my words and copy one of those. (C) I ask the teacher or somebody else. | (D) I scribble over it or I erase it. (K) I ask the teacher for help. (M) I make a picture. |

| Interview Question | Responses | |
|---|---|---|
| | Dramatists | Patterners |
| Who is a good writer that you know? What makes him/her a good writer? | (S) My brother. He's 9 and in grade four. (C) If their favorite thing is writing then they would do it all day. (J) My mom, 'cause she writes very nice, like princess writing. | (D) My brother. He's bigger than me. (M) Kevin. He made a letter for me. (K) I don't know. |
| If this good writer had trouble with their writing, what would they do about it? | (S) He would erase it. (C) They would probably just stick it out. If they wanted to write a story and they had a problem, they'ld just have to think about it. (J) Maybe she would ask me or my dad. | (D) He would erase it. (M) He might do a picture. (K) I don't know. |
| What would do you do if you saw someone was having trouble with their writing? | (S) I would tell the teacher. (C) I'ld tell them stories. (J) I would ask them: "What's wrong with your writing?". | (D) Erase it & it for them. (M) Help them. (K) Help them. |
| What would teacher do to help that person? | (S) She would just say, "Fix it up!". (C) Help them with some of the writing. (J) Talk a lot about letters and how it sounds. | (D) She would a erase it. (M) Maybe she would do it. (K) Help them. |
| How did you learn to write? | (S) My mom told me that you make the sounds and when you put them together you have a word. (C) My mom taught me how to spell her name. (J) My preschool and my mom told me the sounds. | (D) I learned by myself by trying. (K) The teacher helped me. (M) I did it myself. |

| Interview Question | Responses | |
| --- | --- | --- |
| | Dramatists | Patterners |
| What would like (C) to be able to do better as writer? | (S) Spell more words. Color in the lines. (J) Do pictures instead of words so I could read it. | (K) I don't you know. (D) Print nicer. (M) Have more a ideas. |
| Are you a good writer? Why/ Why not? | (S) Yes, because I can spell. (C) No, because I scribble. (J) Yes, because I know sounds. | (D) Yes, 'cause I write good. (K) No, I don't know how to write. (M) Yes, because I write and color good. |

Examination of these responses points to the varying perceptions which each group held in regards to writing. Patterners appeared to hold a view of writing in which form and conventionality of text was important. Their responses focused on encoding and neatness of texts. Dramatists also discussed aspects of encoding (such as sounding out words) but this was in addition to comments about finding ideas, sharing stories, and reading what you or others have written. They appeared to hold a much more inclusive view of writing. Content and form were important to the Dramatists interviewed.

## Summary of Results

### How drawing and writing were combined

All of the collected products contained drawings and writings which were thematically related. The most prevalent type of product produced by both Dramatists and Patterners was one in which the drawing provided a meaningful context for the writing.

### Personal stance

The roles of commentator and observer were most common among both Dramatists and Patterners. Although cumulative percentages indicated that Dramatists preferred the observer stance and Patterners preferred the commentator stance, this was not consistent among all three children in each group.

### Narrative movement

Results indicated that half of the collected products did not contain evidence of narrative movement and half either implied or/actually contained narrative movement. Patterners appeared to include or imply movement in their texts more often than Dramatists did.

### Writing Process Components

The four components of the writing process were analyzed to determine similarities between Patterners and Dramatists in terms of message quality. This included their control over the message to be expressed and their system for expressing it. Table 15 summarizes these similarities and differences.

**Table 15**

<u>**Writing Process Components:    Dramatists vs. Patterners**</u>

| Component | <u>Dramatists</u> | <u>Patterners</u> | <u>Both Groups</u> |
|---|---|---|---|
| Message Formulation | *specified actual words | *higher level of coherance | *specified topic *all messages related to graphics |
| | *one-word labels | | *single and multiple sentence lengths |
| Message Encoding | *45% of time | *84% of time | *segemented oral message *adult-dependent *used personal or conventional system of sound/symbol correspondence |
| | *used letter-name strategy | | *spellings based on visual recall *used references |
| Mechanical Formation | | | *conventional use of letters or letter-like symbols, fluently formed *conventional directional pattern, some spacing |
| Message Decoding | *Sammy & Jillian seg-mented written message into phrases *used situational context and letter-name strategies *Caroline relied on adult for decoding | *Meghan decoded without segment-ation *Kathryn & Donald relied on an adult | *used a personal/ conventional system of sound/symbol correspondence *used visual recall |

## Topics of Talk

Overall, Dramatists talked more than Patterners during the observed journal writing sessions. Both groups talked most often about their ongoing journal writing tasks. Equal percentages of each groups' talk was perceived as directly related to a peer's composing event. The percentage of talk involving others in one's own task was also similar for Patterners and Dramatists. The percentage of task-related talk was similar, but the focus of that talk varied between the two groups. Dramatists talked more about related experiences, whereas Patterners used the referent category more often in task-related talk. Dramatists engaged in twice as much non-task related talk as Patterners.

Generally, Dramatist talked most often about the actions or state of the depicted figures and events whereas Patterners talked more about the symbolic vehicle itself. However, variability within these areas was noted among group members. Both groups talked some about their own feelings and actions.

## Language Functions

In most instances, Patterners and Dramatists used talk to serve similar functions. Directive language was used most often, followed by representational language, personal language, heuristic language, and interactional language. Their strategy use was similar as well. Differences in the focus of personal language was evident. Dramatists engaged

in three times as much playful language as Patterners.
Patterners' personal language was more self-evaluative than
Dramatists.

Meaning Elements

For both Patterners and Dramatists meaning elements
were most evident in their talk.  This was followed by
meaning elements in their writing, and drawing.

Within each medium various meaning elements were
focused on by each group.  These are summarized in Table 16.

**Table 16**

Meaning Elements focused on within Talk, Drawing & Writing

| Medium | Dramatists | Patterners |
|---|---|---|
| Talk | -actions<br>-actors, objects, time/<br>space, sensori-motor<br>qualities | -actions<br>-objects, actors,<br>time/space, sensori-<br>motor quailties |
| Drawing | -focus on objects, actors,<br>actions, & sensori-motor<br>qualities | -focus on objects,<br>actors & actions |
| Writing | -focus on actions, actors,<br>objects, & time/space | -focus on actions,<br>actors |

# CHAPTER FIVE

## Summary, Discussion, and Recommendations

### Summary

The present study was designed to investigate the possible relationship between symbolic style (as determined using Sullivan's [1986] criteria) and kindergarten children's early writing attempts. Six focal children were selected from a total of 26 children. Sammy, Caroline, and Jillian represented the Dramatist group; Donald, Meghan, and Kathryn represented the Patterner group. All of their written and drawn products, observations of journal writing sessions, and responses to interview questions were analyzed to determine any similarities or differences in their approaches to journal writing and views of writing in general.

The study sought answers to questions relating to both the written/drawn products themselves and to the processes observed as the children were involved in writing. Comparisons were made between Patterners and Dramatists in each area. Of interest were the following issues: how the observed children combined drawing and writing; what personal stance was evident in their work; if they included narrative movement in their texts; the message quality of their work; what they talked about as they drew and wrote; the functions of this language; what meaning elements were

contained within their talk, drawings, and written texts, and; how they viewed writing in general and the processes involved in learning to write in particular.

The previous chapter presented the results of the study. Analyses revealed both similarities and differences between Patterners and Dramatists. Differences among group members were observed in some instances. The present chapter compares the children's written/drawn products and observed writing behaviors both to each other's and to those described in the literature. A brief discussion of differences within groups follows. It concludes with recommendations for practice and suggestions for further research.

## Discussion of Results from Product Analyses

### How drawing and writing were combined

Differences perceived between Patterners and Dramatists in how they combined drawing and writing were minimal. All of the focal children produced journal entries which contained drawings and writing which were thematically related. This finding differs substantially from Dyson's (1982) research findings. She discovered, in her study of the interrelationships between drawing and early writing, that the intermingling of drawing and writing which were not related thematically was the most typical type of written product produced by the kindergarten children she observed.

One possible explanation for this difference may be that her observational period was earlier in the school year than in the present study. In addition, the products collected in Dyson's study were spontaneously produced with no guidance from the teacher. The products collected in this study were shaped by the teacher's expectations for journal writing, which included copying a dictated "key word", drawing a picture and writing about the selected word. The order of production was not significant, but the expectation was that these products would be related thematically. This may explain why the most prevalent type of product produced by both Patterners and Dramatists was one in which the drawing provided a meaningful context for the writing.

One observed difference in how drawing and writing were combined was that Dramatists included writing as a part of the drawn graphic usually in the form of a speech bubble holding the depicted figures' talk. Patterners, on the other hand, were not observed combining drawing and writing in this manner. This does not seem unusual given that the Dramatists' stories included many character interactions and dialogue was common in their told stories. This was one of the distinguishing factors of their storytelling observed in phase one.

An additional variation between groups was noted in the level of coherence between the graphics and the written message. Cohesiveness was more evident in the Patterners'

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products than in those produced by the Dramatists. This finding is supported by previous research (Gardner, Wolf & Smith, 1982; Wolf and Gardner, 1979) in which the drawing behaviours of Dramatists and Patterners are described as follows. When drawing, Dramatists used graphic symbols as props in a told story, where drawing was part of a larger activity. Patterners focused relatively more on the physical aspects of a figure to be represented, creating a picture "about" the object world. When examining the products created apart from the language which surrounded their formation, it is likely that Patterners' drawings (being more representative of the figure or object selected) would be judged to be more related to the written message than the Dramatists.

Personal stance in children's texts

When the collected products were anlayzed for evidence of personal stance, the roles of commentator and observer were most common among both groups and the role of actor was the least observed stance. These result are supported by Dyson's (1989) research. She reported that over a three year period, the observed children "moved away from the early tendency to comment on pictures, toward a tendency to observe scenes and, finally, to act within their textual worlds" (p.296). During the first year of her study the children were in Kindergarten. As the present investigation was conducted during the months of February through May, it

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would seem reasonable that some of the children would have advanced beyond texts which were dominated by drawings. This was evident in their use of various personal stances in writing.

Movement in children's texts

Differences were evident in the amount of narrative movement contained in the children's texts. Texts written by Patterners implied or included movement more than those written by Dramatists (59% vs. 41%). Perhaps this was because the Dramatists had talked more about the actions of the depicted figures while drawing than the Patterners had (as results of analysis of childrens' talk revealed) and thereby did not include this in their written texts. This message had already been relayed through the medium of talk. This explanation would be consistent with Dyson's (1989) description of one child's narratives which were based on actual movement through time and "depended on dialogue and on new information beyond that included in the talk accompanying her drawing" (p.135).

**Discussion of Results from Composing Process Analyses**

Writing Process Components

In relation to the writing process components analysis, Patterners and Dramatists were alike in many ways. However, two revealing differences were evident. Firstly, segmentation of the oral message during encoding was much

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more prevalent among Patterners than Dramatists. Dramatists usually did not segment oral language during encoding. When some did, it was to the phrase level only. They appeared to be concerned with keeping the message flowing. Patterners, on the other hand, segmented the oral message into phrases, words, syllables, and sounds 84% of the time. They focused more on the words which were being recorded than the overall message.

Comparing this to the strategies observed during decoding, Dramatists still only segmented to the phrase level. Meghan was the only Patterner observed decoding independently. She did not appear to segment the written message, but relied on quick visual recall of words. Perhaps if she had not been so successful with visual recall more segmentation would have been evident.

Similar differences in approaches to decoding were noted in Bussis, Chittenden, Amarel, & Klausner's research on learning to read (1985). They described two groups of children with varying focuses during reading. One group (similar to the Patterners described in this study) focused on the accurate decoding of words; their self-directed talk (oral reading) reflected their deliberate attempt to figure out individual words. Other children (like the Dramatists observed) focused relatively more on keeping the message flowing smoothly; their self-directed talk revealed the orally reconstructed story. One can only speculate that

these children would approach encoding in similar ways, focusing more on either the words or the message.

Although both Patterners and Dramatists frequently requested the spellings of words, differences were evident in the types of words requested. Patterners often requested labels for common objects or objects from within the immediate environment whereas Dramatists' requests for labels were for more specific, personal reasons. Many of the requests from Dramatists were for names of people and places. This pattern of behavior is consistent with descriptions by Gardner, Wolf, & Smith (1982) and Wolf & Gardner (1979) of Patterners as object-oriented and Dramatists as more socially-oriented children. This tendency to be either object- or socially-oriented may be related to the type of words each group requested.

Topics of Talk

All of the children in this study used talk most often to suggest or to elaborate upon the meanings of their own written texts and drawn graphics. Further analysis of this task-involved talk revealed that each group talked about different aspects of writing as they worked. Dramatists talked most about the actions or state of their depicted figures whereas Patterners talked most about the symbolic vehicle itself (the act of drawing and/or writing). They talked about letters and sounds, where to put their texts, and how to draw various objects. This finding concurs with

Dyson's (1989) research in which some of the observed children's talk was not only a tool for directing the act of drawing; it also served with drawing to represent meaning. These children (like the Dramatists in the present study) commented on and, at other times, dramatized the feelings or actions of the figures and events in their drawings and writing. They used language "in activity". Other children (similar to Patterners) focused their task-involved talk on their own feelings or actions and it served to direct -- to plan and organize -- and evaluate their drawn and written graphics. They talked "about" their activity.

In addition to task-involved talk, both groups also talked about what their peers were doing. The percentage of talk which served to involve others in one's own task was similar for Patterners and Dramatists. In a related study, Dyson (1989) discovered that the children's comments on each other's work could lead to talk that was task-related. She found that in kindergarten and early first grade most of the children's talk about each other's work or about the wider world of experiences happened during drawing. This was true of the talk observed in the present study as well. This pattern is not unusual given that drawing is one of the earliest means of graphic representation over which children gain control. Their drawings and the process of creating them are often infused with and surrounded by talk. Thus, children may confront the question: How do meanings

formulated in colorful drawings and/or lively talk "fit" onto the flat symbolic surface of written text?

Of the talk which was task-related, differences were noted between what Patterners and Dramatist focused on. Dramatists talked more about related experiences and Patterners used the referent category of the objects or events being depicted more often. This difference is consistent with each groups' overall orientation to drawing. Dramatists have been described as being socially-oriented. Therefore, it is not unusual for them to use thematically-related experiences when talking to their peers. Patterners, being object-oriented, would likely use the referent category of the objects or events of their peers' drawing in their task-related talk.

Non-task talk was perceived as not falling into any of the preceding categories. A major difference between groups was noted in the amount of non-task talk. Dramatists engaged in two times as much non-task talk than did Patterners. However, the relevance of talk initially perceived as nontask-involved talk could eventually become apparent. This was often the case with the Dramatists' talk. For example, Caroline had been talking with her peers about an upcoming birthday party, a subject that had no clear relevance to her ongoing composing event. After completing that journal entry, though, she immediately began another about her party. In relation to the composing event

she was engaged in as she spoke, the talk about her party was nontask-involved. However, in relation to her new composing event, that same talk was task-involved and focused on the event to be rendered. When this type of non-task talk (which sparked ideas for future topics) was eliminated, both Patterners and Dramatists had similar percentages of talk in this category. This finding may be of interest when examining the origins of the topics the children chose. Perhaps, because they talked more, the Dramatists had an easier time deciding on interesting topics to draw and write about next. As this was not focused on in this study, one can only speculate that Patterners may have had more difficulty finding topics quickly.

Language Functions

In most instances, Dramatists and Patterners used talk to serve similar functions. The use of language to direct the actions of self or others was the most frequent language function observed. Although the children's strategy use within the various language functions observed was similar, one interesting difference in strategy use was noted within the Personal Language category. Dramatists engaged in the playful use of language three times more than Patterners but their personal language was less self-evaluative than Patterners'. This relates back to the discussion of task-involved talk. Dramatists' talk was primarily expressive. It was an integral part of the symbolic activity itself.

Patterner's talk, in contrast, was primarily analytic. It was an adjuct to activity, a way of monitoring their own constructive behavior.

## Meaning Elements

Meaning elements were found in all three mediums examined (talk, drawing, and writing). For both Dramatists and Patterners meaning elements were most evident in their talk. Talk focusing on actions was the most common for both groups. Perhaps this was due to the fact that it was much easier to talk about actions than it was to draw them or, for some children, to write about them. As can be expected, Patterners focused more of their talk on objects; Dramatists focused more on the actors. This is consistent with findings related to topics of talk discussed previously.

To a lesser degree, meaning elements were evident in the children's drawings and writing. As previously discussed, drawing is the first symbolic medium over which children gain control. However, in order to share the meanings related in these drawings the children must often talk about them. As these children continued to explore writing they were able to place increasing amounts of meaning into this medium. Analysis of meaning elements within talk, drawing, and writing helped clarify the information-rich nature of the children's talk.

## Discussion of Responses to Writing Interviews

A question of interest in this study was whether in fact a child's notions about writing could be related to their symbolic style. It appears that many of the differences in the products and processes observed may be related to the childrens' views about writing. Responses to the writing interview questions revealed that each group seemed to be focusing on different aspects of writing. Patterners appeared to be more concerned with the form of their writing than Dramatists were. The Dramatists responses also focused on form, but the emphasis appeared to be on the communication of a message. Further investigation of the children's perceptions about writing would be required to make a definite statement about this.

Similar views about writing were described by Dyson (1985). Tracy (who was labelled a Patterner) was described as follows:

> "For Tracy, writing appeared to involve the creation of a visual image which served as a referent's label. There was no observed attempt at written communication with a particular audience" (p.86).

In contrast to Tracy, Rachel (who was labelled a Dramatist) was described as follows:

> "For Rachel, writing was not tied to concrete referents. Rather, it was a system for expressing meanings, meanings which were first represented through talk. Writing was primarily a form of communication" (p.87).

These varying views toward writing resulted in different written products.

One can only speculate as to the direction of this relationship between products and perceptions about writing. Perhaps this relationship is not linear but rather circular in nature. As the young child observes and experiments with various written products, their views about what is important about writing are influenced. At the same time, these developing views affect the products they then create. The reaction to these products by peers and adults may once again reform the child's perceptions about writing. These new perceptions then influence subsequent written products.

A possible reason for the observed differences between Patterner's and Dramatists' views about writing may lie in their preferred style of approaching symbols. Previous research by Dyson (1985) found similar differences. However, no firm conclusions can be made from the limited data of this investigation.

### Discussion of Differences within Groups

Despite the fact that the focal children were selected from the outer quartiles of symbolic style scores, differences between the children within each group were evident in some of the areas examined. Each child appeared to have different ways of approaching writing, approaches which made sense when each was viewed within the context of

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his\her own unique interests and style of functioning. Differences within groups were evident through both product and process analysis.

Related to the analysis of products for evidence of personal stance, some inconsistencies among group members were noted. Although Dramatists Sammy and Jillian assumed the observer stance most often, Caroline usually wrote as a commentator. Variation within the Patterner group was also evident. Kathryn appeared to prefer the observer stance while Donald was usually commenting on his graphic products (commentator stance) and Meghan appeared quite flexible using a variety of stances in her writing.

One explanation for such inconsistencies among the groups may be that personal stance within writing is tied in some way to ability or experience with writing. Findings from Dyson's (1989) research support this view (as discussed previously in the section on personal stance).

Analysis of writing process components also revealed some differences within the groups. Although both Dramatists and Patterners used adult-dependent encoding strategies for at least part of their writing, this strategy was not used equally by all of the children in a given group. It was used consistently by Donald (P) who dictated almost twice as many entries as the other focal children. He rarely wrote his own texts. Jillian (D), Sammy (D), and Meghan (P) were the most independent in their writing, but

each still dictated about one-third of their entries. Kathryn (P) and Caroline (D) each dictated about one-half of their texts and wrote the remaining half independently. These inconsistencies among group members may again be related to experience with written language. As the children gained increasing control over writing they became more independent and relied less on an adult to record their messages.

Analysis of the talk which occured at the journal writing centre revealed that the amount of talk varied between the two groups. Although Dramatists talked more than Patterners overall, some inconsistencies within each group were noted. Dramatists Jillian and Caroline talked about the same amount whereas Sammy talked slightly less than they did. Within the Patterner group, Kathryn and Meghan were similar but Donald talked much more. He talked almost as much as Jillian and Caroline. There could be several reasons for this difference in amount of talk. First, the child's mood or state of mind would probably affect how much they talked. Another possible reason may be who the children were working with. Friendships played a significant role in how comfortable the children felt in expressing themselves in talk. As the small group with which they wrote varied, so too did the amount of talking.

## Summary Discussion

This study of young kindergarteners' writing, then, documents the variability and individuality of aspects of early literacy development and thus complements the work of Bissex (1980), Bussis et al. (1985), Clay (1975, 1979), and Dyson (1982, 1985, 1987, 1989). Dyson (1989) states that an individual's ways of interacting with people and symbolic materials is an organizing force in writing development (p.259). These children had different styles and their journal activity was supported by different symbolic and social processes. Thus their ways of carrying out this activity differed as well.

Variable child strategies for exploring the symbol system were evident. The exact strategies a child uses may vary with what exactly the child is attending to or trying to figure out about written language.

Even acknowleding, however, that the nature of children's literacy tasks -- and thus particular child behaviors -- will vary, the essential developmental challenges seem generalizable. For example, young children may write stories on blank paper, which does not physically separate drawing from writing. In such a task they may mix media (Dyson, 1982; Gundlach, 1982; Harste et al., 1984) in which the written words and pictures are all enveloped in one told story. Nonetheless, the children's developmental questions remain the same: What of the story is actually

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recorded? In what symbolic media? How can the interaction
with others that surrounds the writing be incorporated
within the written text itself? Such questions would seem
to arise both from the children's own actions as drawers,
talkers, and writers, and from the social responses their
work generates. These questions activate the tensions
inherent in the children's multimedia efforts. Those
tensions or those productive conflicts, set learning and
exploration on its way (Piaget & Inhelder, 1969).

Early Writing as Symbol Development

The writing observed in this study, in both
similarities and differences noted across children, also
complements the literature on earlier occurring symbol
development. For example, in all areas of symbol
development there are reported differences in children's use
of varied symbolic materials (language, blocks, drawings), a
phenomenon discussed earlier in the literature review.
Certainly the observed children made contrasting uses of
written and drawn graphics.

The differences in use of symbolic materials have been
associated with different forms of products (e.g., speech,
block constructions, drawn pictures). These differences in
use may lead to different routes to symbolic competence
(Nelson, 1981; Wolf & Gardner, 1979). Comparisons can be
made between the varied writing behaviors of the observed
children and the variations described in the literature on

symbol development. In Wolf and Gardner's terms (and based on their performance on twelve symbolic style tasks admininstered in phase one of this study), Sammy, Caroline, and Jillian appeared to be Dramatists; Donald, Meghan, and Kathryn appeared to be Patterners.

The results of this study do support the notion of children approaching writing in ways which may be similar to their approach to symbolic tasks in general. However, there is not sufficient data to support the suggestion that there are particular types of child writers or preset paths children follow in learning written language. Longitudinal data on individual children is not available. The observed differences may be the result of symbolic styles, environmental input, and/or some other factors yet to be determined. Nonetheless, from the children's displayed differences, certain implications for both practice and research are clear. These are the focus of the next sections.

### Recommendations for Practice

Based on the findings and interpretations of this investigation, several implications for practice follow. Learning to write involves coming to understand how written graphics function as a symbol system. Individual children may focus on varied aspects of the writing act. Thus, the concept of individual differences implies the importance of

careful observation so that teachers may understand children as unique individuals with particular styles of writing and approaches to writing.

Second, as the study progressed it became more and more evident that young children express meanings not only in written texts, but also in their drawings and especially in the talk which surrounds the writing activity. Therefore, as teachers, we must acknowledge all modes of expression and legitimize them as valid forms of communication for the young child. In addition, we might also consider the range of contexts for writing presented in school. Children need opportunities to identify the diverse range of situations in which writing and/or drawing are effective modes of expression.

Third, the perceived relationship between young children's early writing behaviors and their notions about writing argues for increased value to be placed on children's own spontaneous exploration of the writing process. For it is through such exploration that these views are developed and refined. Direct or indirect instruction could also serve to shape the young child's views about writing. The structure provided for the children's writing and the classroom context both influence the child's notions about writing.

Finally, the results of this study suggest caution in treating written language as a system of rules (e.g.,

governing letter formation, meaning encoding) that can be divorced from the intentions of the symbolizer -- the child. Also suggested is caution in implementing curricula organized around sequential skill mastery without first considering the child's intentions that will organize skills in sensible ways to accomplish ends, and, second, without regard for the individuality of each child. This research suggests, therefore, both the necessity of critical evaluations of literacy programs for the way in which they treat written language and the importance of teacher sensitivity to ways individual children approach writing.

## Suggestions for Further Research

This study was an attempt to begin to explore the general question relating symbolic style and emergent writing behaviors. Findings indicate the possibility of such relationships. However, such a connection at this point appears too expansive and complex for any one focus of research to be conclusive. Research is needed to further explore the observational results of this study. Several suggestions for further study follow.

1. Within this study, children's journal writing was the only type of writing examined. Patterns of behavior were described based on this one writing context. Would these same patterns of behavior be evident in other writing contexts?

2. How does the child's identified symbolic style influence their spontaneous writing at school or at home? Links between home and school writing need to be examined to gain a full picture of each child's approach to writing.

3. All of the children in this study were monolingual, caucasian children who came from middle-class homes. Would children from other cultural, ethnic, and socio-economic backgrounds demonstrate similar behaviors? Are there cultural differences which affect how young children explore the use of symbols? Researchers of early literacy have not extensively examined variability in children's explorations of written language.

4. As evidenced in this study, children can appear more or less skilled, depending upon which aspect of the written language system we are focusing on. Therefore, investigations of young children's writing should focus on more than one aspect of the writing process.

5. The children in this study demonstrated that meaning elements may be found in drawing, talk, and written texts. To understand the beginnings of literacy researchers cannot be interested only in text. They must look for its beginnings in all the forms of symbolizing that children use.

6. This study considered children's varying conceptions of writing and what is involved in learning to write. This consideration raises another question: Where do children's

conceptions of writing come from? While individual differences may be related in part to individual makeup, certainly the environment has a role to play.

7. The question of whether or not perceptions about writing are changeable also arises from this study. If children's views are not fixed, what influences them? What effect would direct or indirect instruction play?

Contextual considerations, links between spontaneous writing done at home and school, possible cultural differences, and the questions of where our conceptions about writing come from and if they are changeable are all promising areas for further research. A more wholistic view of writing development must be taken as researchers examine products, process and child intentions for writing.

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## Sample Log Entry

February 6, 1991.

Meghan
- word was "friends"
- drew first, picture contained rainbow, two children (a boy and a girl), ground, grass, and a sun
- she wanted to do her own story (not dictate)
- printed
    Meghan.AND.
- then asked for spelling of Kyle
    Meghan.AND.KYLE.WAS.FRIENDS.
- asked for went, knew beginning and ending consonants
    Meghan.AND.KYLE.WAS.FRIENDS.WENT.TO.THE.
- asked for store
    Meghan.AND.KYLE.WAS.FRIENDS.WENT.TO.THE.ST.
- a period was placed between words, left no spaces

Donald
- asked for word "rocket"
- some difficulty copying the word
- careful drawing of a rocket going up
- used gold and silver
- dictated story
    I am in the rocketship.

Jillian
- word was Mom
- picture of her mom was quite complex
- included hair, eyes, nose, mouth, eyebrows, cheeks, body, skirt, arms, legs, shoes, hair ribbons
- no color
- good copying of word
- no story (yet)

Michelle
- word "dragon"
- drew with pencil, colored with wax crayon
- drew picture quickly and wanted help with her story. As I and parent helper were both busy, she worked on her own.
- wrote "One day a dragon was walking on his mother's
        back.

        1 DAD-A-dragon- VAS-UAL
        KING-ON HIS MOTHERS
        BACK

- helped by parent to spell walking, mothers, and back.

## Criteria for Determining Media Responses

| Patterner | Dramatist |
|---|---|

### Drawing

| Patterner | Dramatist |
|---|---|
| -emphasis on design: human object orientation personalization | -emphasis on content: orientation, |
| -careful placement of parts on the page | -medium becomes a prop to tell story |
| -interest in shape, line, color, elaboration of scene, detail | -language use: to comment on scene or talk about self, talking -- then drawing |
| -language use: to comment on product | |

### Clay modeling

| Patterner | Dramatist |
|---|---|
| -interest in properties of clay (e.g., excessive smoothing out, reshaping) | -lack of detail in itself perfecting product |
| -concern with proportion, detail | -use of product as a prop (e.g., making a car and then moving it) |
| | -content: human orientation |
| language use: as in drawing | -language use: as in drawing |

### Language (Storytelling)

| Patterner | Dramatist |
|---|---|
| -story propelled by action, description | -story includes character interactions |
| -atemporal -- no logical sequence | -interpretive, sequential, autobiographical |
| -a lot of objects included, itemization | -a lot of dialogue |
| -on completion task: repetition immediate ending | -on completion task: dialogue, other or characters introduced |

### Symbolic Block play

| Patterner | Dramatist |
|---|---|
| -object orientation imaginary play with objects based on visual properties of blocks structural actions: stacking, lining up | -character orientation: - naming, further distinct- -ions such as roles, sex -depictive actions: - little relation between form of the block and its part in the play |
| -language: statements about the blocks | -language: dramatic dialogue, narrative |

Source:   Sullivan (1986), p.14

## Symbolic Style Rating Index:   Patterner vs. Dramatist

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**Name:**_____        **Task:**_____

| **A. Approach to Task** | **Patterner (-)** | **Dramatist (+)** |
|---|---|---|
| Response to experimental setting: | reluctant | enthusiastic |
| Response to task: | task-centered | experimenter-centered |
| Type of action: | structural | depictive |

| **B. Use of Language** | | |
|---|---|---|
| Amount of language: | a little | a lot |
| Language/action relationship: | separate | simultaneous |
| Language/task relationship: | related | unrelated |
| Form of language: | descriptive | expressive |

| **C. Approach to Design** | | |
|---|---|---|
| Orientation: | object-oriented | person-oriented |
| Arrangement based on: | formal properties | narrative properties |
| Emphasis on: | design | content |

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Source:  adapted from Sullivan (1986), p. 19

## Characteristic Responses to Symbolic Style Tasks

### A Patterner Profile

Kathryn spent 18 minutes engrossed in her free-choice drawing task.  She worked silently and meticulously on a drawing of her favorite topic, rainbows.  She carefully filled the page with bands of colour, using all the available markers.  The reoccurence of preferred themes identified by Gardner, Wolf, and Smith (1975) can be seen in Kathryn's response to the free-choice task in modelling with Play-Doh.  Her mastery of motifs and schema related to rainbows were used as she completed a "drawing" with Play-Doh.  By adapting imagery and skill to a less familiar medium, Kathryn was able to create a colorful model of a rainbow.

Kathryn's preference for visual media was reflected in her brief responses to storytelling tasks.  When problems were clearly specified, Kathryn's approach was logical and serious.  When told the beginning of the story about the lady who is looking for a parking spot and asked to finish the story and show the actions using wood blocks, Kathryn proceeded to show the lady finding a parking spot, getting the milk from the store, and then returning home.

Tasks that required Kathryn to speculate on the possible role of unusually shaped blocks elicited a list of responses that were based on visual similarities.  This focus on form was further emphasized when Kathryn was asked to tell a story using the blocks.  She spent some time selecting, ordering, and matching forms as she associated them with objects and ideas.  "I'm going to make a car, these are the wheels, or I can use this long piece to make a bridge, no, I'm going to make a house."

Once underway, Kathryn's only comments were descriptions related to the problem at hand.  When asked what her story was she replied that she didn't have a story to tell.

Kathryn's characteristic approach to symbol use can be seen to conform to the Patterner profile.  Her allegiance to visual forms and expression and her use of precise and logical problem-solving skills appear relatively uniform across media.

## A Dramatist Profile

Sammy's response to the free-choice task in drawing was completed in a few minutes, yet the detail in the drawing did not match the complexity of the verbal description. Sammy took some time to explain why the boy in the picture was sad and why the clouds looked the way they did. "Are you wandering why the clouds look that way?  The clouds are moving away from the sun.  He [the boy] would have to stay inside until the sunburn went away."

The availability of Play-Doh offered a range of possibilities as Sammy initially used a plastic knife and fork to make the ball of Play-Doh into a sandwich, then perogies, and finally some chicken which he then proceeded to "eat" as the other children watched.  This was followed by his statement that he was pretending to be in a store as he "paid" for a sandwich from Caroline with a large blob of Play-Doh.  "I have $100.00, right here."  He then proceeded to pretend to take a large bite and exclaimed, "Needs some more sour cream.  Extra sour cream, please."

Storytelling provided Sammy with an ideal forum for his rich repertoire of animated actions, gestures, and expressive voice as he created elaborated tales.  Sammy's completion of the story of the lady who is looking for a parking spot was a good example:

She's getting her parking spot now.  He's going to go see if there's anyone home in this big yellow house. He asked the girl that took the car away if that was her house.  "Is that your house down there?  The big yellow house with the big yellow roof?"  She said, "Yes."  He followed her.  She went to her house.  She unlocked the door.  There.  He's going to get some furniture out.  There.  She had a bed for him, just all made and ready.  She had a boat from a big stream.  It was a big tug boat.  And then her went to the big tug boat.  The woman followed it.  It jumped back into the stream and so did the lady.  It was a water car.  And then the boat fell apart and she put the boat back together.  Then the man went all the way to the gas station.  (I'm going to make a gas station now.  What can I use?  Esso gas station 'cause that's where my dad goes to put gas in his work car.)  It sounds like a real car.  It went so fast that it bumped into a jeep and the jeep bumped into the gas station.  The gas station fell apart.  The man inside the service station heard a big crash.  Then the big yellow car went to the yellow house and he thought that the lady must have

> bought a new car.  He went and selled his jeep.  He
> went to a store and he bought a new car- a big, big,
> red car.

Sammy's narrative was enhanced with blocks being used to
depict the ongoing actions.

These descriptions of Sammy's use of symbolic media
conform to Dramatist characteristics.  His aptitude for
verbal communication can be seen to influence his response
to tasks across media.

# APPENDIX C

## Writing process categories

WRITING PROCESS COMPONENTS

### Message Formulation
1. Level of specificity
    (a) the topic of the message is specified (e.g., "It's about a ninja.")
    (b) the actual wording of the message is specified (e.g., "This is going to say, 'The ninja is in karate.'"
2. Level of coherance
    (a) no apparent relationship exists between the message and graphics previously drawn on the page
    (b) message is related in some identifiable, thematic way to other (but not all) graphics on the page
    (c) entire product produces a coherent whole
3. Level of linguistic organization (adapted from Clay, 1975)
    (a) word
    (b) any two- or three-word phrase
    (c) any simple sentence consisting of 3 or more words
    (d) a group of 2 or more sentences

### Message Encoding
1. Segmented oral message
    (a) not applicable (i.e., one word message[s] not segmented into smaller units)
    (b) no segmenting exists
    (c) message is segmented into phrases, words, syllables, or sounds
2. Systematic procedures for encoding segments (i.e., procedures for independently selecting particular letters to represent particular oral language segments)
    (a) no orthographic systematizing exists (request entire message be encoded by another)
    (b) some systematizing; child may (i) use a letter-name strategy, (ii) use personal or conventional system of sound/symbol correspondences, (iii) request spelling of a segment from another, (iv) base spelling on visual recall, (v) consult a reference (e.g., word list)
    (c) a combination of systematic and nonsystematic procedures

WRITING PROCESS COMPONENTS (Continued)

<u>Mechanical Formation</u>
1.  Conventionality of symbols
      (a) intermingling of letters and letter-like forms
      (b) letters
2.  Ease and efficiency of production
      (a) some strokes are slowly drawn
      (b) letters or letter-like forms are fluently produced
3.  Spatial arrangement (adapted from Clay, 1975)
      (a) conventional directional pattern
      (b) conventional directional pattern and spaces between
      words
      (c) extensive text without any unconventionalities of
      arrangement and spacing of text


<u>Message Decoding</u>
1.  Segmented written message
      (a) not applicable (i.e., one word message not
      segmented into smaller units)
      (b) no segmenting exists
      (c) the written text is segmented (i.e., particular
      portions of the text are focused on to be decoded into
      particular oral phrases, words, syllables, or sounds)
2.  Systematized procedures for decoding segments
      (a) no systematic orthographic procedures used for
      decoding  text; child may request entire message be
      decoded by another
      (b) some systematic orthographic procedure or
      combination of procedures are used; child may (i)
      request encoding of segment from another, (ii) use
      situational context as the basis for decoding, (iii)
      use a syllable-based decoding system, (iv) use a
      letter-name strategy, (v) use a personal or
      conventional system of sound/symbol correspondences,
      (vi) base decoding on visual recall of a similar word.

## Worksheet used to analyze and code composing events

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WORKSHEET

Child's name _____
Composing event # _____

---

COMPOSING EVENT

---

COMPONENTS

Message Formulation        present ____
                           absent ____

1.  Level of specificity                      _____

2.  Level of coherence                        _____

3.  Level of linguistic organization          _____

Message Encoding           present ____
                           absent ____

1.  Segmenting oral message                   _____

2.  Systematized                              _____

Mechanical Formation       present ____
                           absent ____

1.  Conventionality                           _____

2.  Discreteness                              _____

3.  Ease & efficiency of production           _____

4.  Spatial Arrangement                       _____

Message Decoding           present ____
                           absent ____

1.  Segmented written message                 _____

2.  Systematized                              _____

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## Language functions and strategies

1.  Representational language:  language which serves to give information about events and situations.  The strategies are:
  (a) labeling or naming
  (b) elaborating or detailing
  (c) reporting an action or event
  (d) narrating a series of actions or events
  (e) dramatizing or acting out a series of actions
  (f) reasoning

2.  Directive language:  language which serves to direct the actions of self and/or others.  The strategies are:
  (a) monitoring (ongoing actions appear to be controlled and  directed); for example, a child is copying a word and says, "A g, and then, and then, and then - a o."
  (b) planning (future actions appear to be controlled or directed); for example, a child is drawing and says, "I'm gonna make a sun in the sky."
  (c) encoding (words and phrases are transformed from the oral to the written language channel)
  (d) decoding (sounds, syllables, words, or phrases are transferred from the written to the oral language channel)
  (e) accessing (seeking or retrieving letters or words from memory; in written language situations, this strategy involves rereading); for example, a child rereads the text in order to remember what word needs to be written next.
  (f) instructing (conveying information perceived as required  by someone else; language used to "teach")
  (g) requesting
  (h) offering

3.  Heuristic language:  language used to explore or to seek information or learn about reality.  Strategies include:
  (a) seeking confirmation; for example, child asks "Is this how you spell was: W-A-Z?"
  (b) seeking fact; for example, a child seeks the identity of unknown characters in a peer's story, asking "Who's the 'them'?"
  (c) seeking demonstrations; for example, a child asks, "Do you know how to draw a jelly bean for me?"

4.  Personal language:  language used to express one's feeling and attitudes.  Three strategies identified are:
  (a) evaluating others
  (b) evaluating self
  (c) playing with language

5.  Interactional language:  language which serves to initiate, manitain, and terminate social relationships.  No division into strategies was done.

## Meaning Elements Worksheet

---

Child's Name: _____

Composing Event # _____

### Meaning Elements

| Medium | Sensorimotor Qualities | Time/ Space | Objects | Actors | Actions |
|---|---|---|---|---|---|
| Talk During Writing | | | | | |
| Talk During Interview | | | | | |
| Drawing | | | | | |
| Dictation (composing) | | | | | |

# APPENDIX D

## Conventions used in the presentation of transcripts

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( )         Parentheses enclosing text contain notes, usually about contextual and nonverbal information; e.g., (sighs, looks at her)

Empty parentheses, on the other hand, indicate unintelligible words or phrases; e.g.,
Meghan:  You're supposed to have one ( ).

[ ]        Brackets contain explanatory information inserted into quotations by the observer, rather than the speaker.

A single large bracket is used to indicate overlapping speech; e.g.
Jen: I wish I were in the land of  cotton candy.
Sammy:                                              cotton candy.

N-O     Capitalized letters separated by hyphens indicate that letters were spoken or words were spelled aloud by the speaker.

NO      A capitalized word or phrase indicates increased volume.

/n/     Parallel slashed lines indicate that the speaker made the sound of the enclosed letter or letters.

/n:/    A colon included in the previous symbol indicates that the given letter sound was elongated by the speaker.

...     Ellipsis points inserted in the middle of a blank line indicate omitted material; e.g.,
Jen:  One day some grass growed in the garden.
...
Does it (day) start with D?

Conventional punctuation marks (periods, question marks, exclamation points) are used to indicate ends of utterances or sentences, usually indicated by slight pauses on the audiotape.  Commas refer to pauses within sentence units, as when the speakers paused between words or word phrases during dictation.  Dashes (--) indicated interrupted utterances.
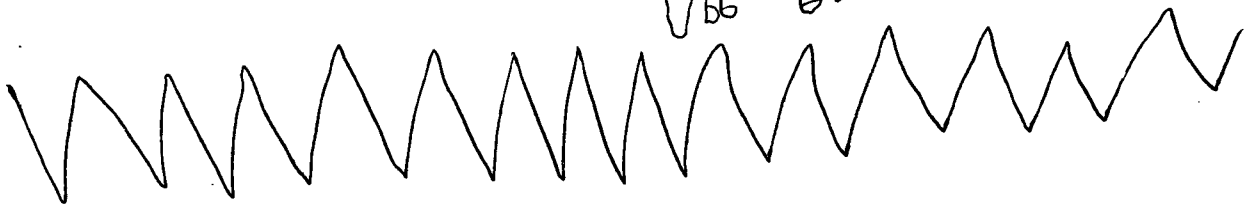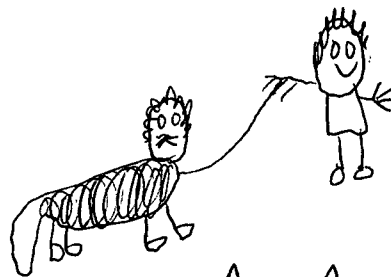
## Samples of Drawing/Writing Combinations

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**Type A:** Drawing and writing contributed (roughly) equally
to the completed product.

### Kitten
by Kathryn

One day there was a cat.  She runned away from home.
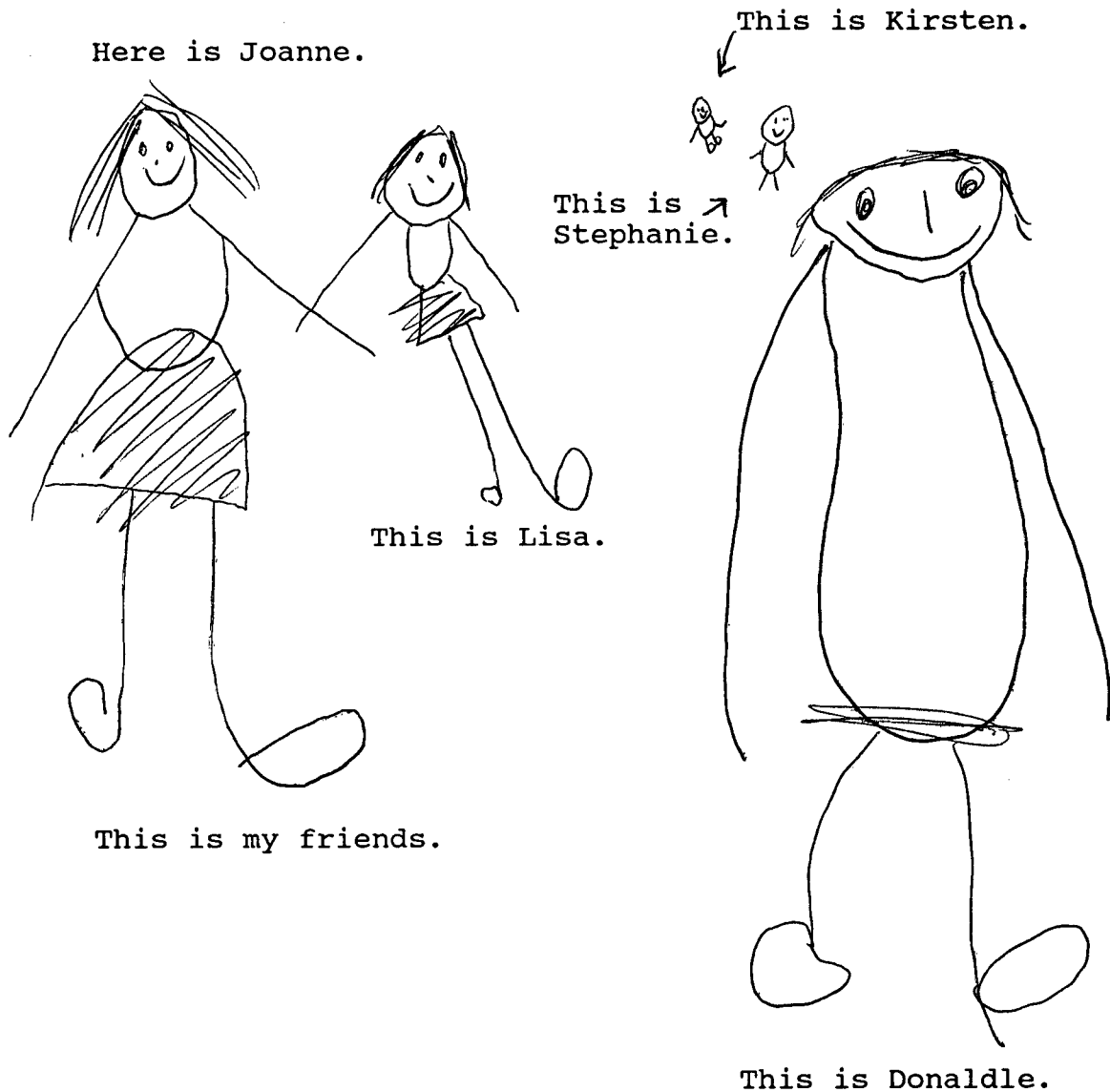She  didn't come back.  But the next day she did.

Type B:  Writing served as a label for at least part of the
         drawn graphics.


Friends
by Jillian


Here is Joanne.

This is Kirsten.

This is ⬈
Stephanie.

This is Lisa.

This is my friends.

This is Donaldle.

<u>Type C:</u>  Writing was part of the drawn graphics.

<u>Eggs</u>
by Sammy

<u>Type D:</u>  Drawing provided the meaningful context for the
writing; it was not simply an illustration of the
writing.

<u>Tree</u>
by Meghan

There was a tree.  It was waiting for a animal to go in
it and there was food in it.

Tree

Th AR WAS A T Ree it WAS WATTeN
FOR A ANNAML TO GO iN iT AND
ThAR WAS fOOD iN iT.