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## SECTION TWO: LEARNING AND THE NATURE OF PRINT

To develop a systematic and theoretically driven approach to assisting children experiencing difficulties in reading and writing, two areas are foundational, those being knowledge of how learning occurs and the nature of print/text. Reading and writing, specific instances of learning that relate to print, will then be discussed.

### *HOW LEARNING OCCURS*

Many different theories of learning exist each emphasizing different elements of the learning process. At the most general level, there are a number of elements which are part of any learning situation. These elements are the learner, the material to be learned, and the activity with the material.

Every human being who comes into the world is a living potential. That potential can be enhanced or can lie dormant depending upon the opportunities for acting on the environment and interacting with people. In other words, the interaction of the human being with the environment is the key to the release of potential.

### **Personal and Social Learning**

The interplay between the learner and the environment may be realized in several different ways. For instance, **personal learning** may occur as a result of the learner's activity with material in the environment. This learning may be informative -- that is, it enhances the learner's knowledge of the features of an object. It may be strategic -- that is, it expands the uses that a learner may have for an object. It may be relational -- that is, it links two concepts of information or usage together.

However, personal learning is insufficient to describe all learning since we are by nature social. Our social nature often results in the mediation of learning experiences by more experienced members of our society. **Social learning** may also be informative, strategic or relational but in each instance it is mediated.

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<b>Personal Learning:</b>	learning by oneself
<b>Social Learning:</b>	learning mediated by others or by using language

Once learners begin to use language (oral or written), they are using a social mediational tool. This tool may be used in interpersonal activity or in personal activity. In other words, if language enters into personal learning, that learning is mediated partially by the culture. However, language does not control learning because if it did new concepts within the culture would remain suppressed and cross-cultural understanding would be an impossibility.

Social learning has two results. First, we become initiated into our culture. That initiation involves developing an oral language category system to deal with our "environmental surround" -- the environmental elements which govern our lives. It leads us to specific ways of structuring and solving problems within our environment. It also involves becoming acquainted with the symbolism which is part of the culture. This cultural initiation process leads to the second result of socially mediated learning.

The second result is that of reducing the time for cultural re-invention by the learner. In other words, the learner does not have to invent the writing system or any other knowledge system of the culture. The knowledge of the culture has been systematized in the process of social transmission. Therefore it is more accessible than if it were randomly dispersed throughout the environment and left to the learner to discover independently.

Learners make similar discoveries as their predecessors. For areas of systematized knowledge, the length of time for such discoveries is compressed in comparison to that of learners who invented the knowledge bases. For areas in which potential knowledge has not been systematized, the learner begins the process of invention, discovery and eventual systematization anew.

### **Hypothesis generation – a key to learning**

Learning is hypothesis driven. In any learning event, the learner brings to bear **prior experiences and samples from the available environmental cues**. The prior experiences that will be activated first are those which seem relevant to the task at hand. The learner cannot possibly sample all that is in the environment because the sheer amount of possible information available would be far too much to handle.

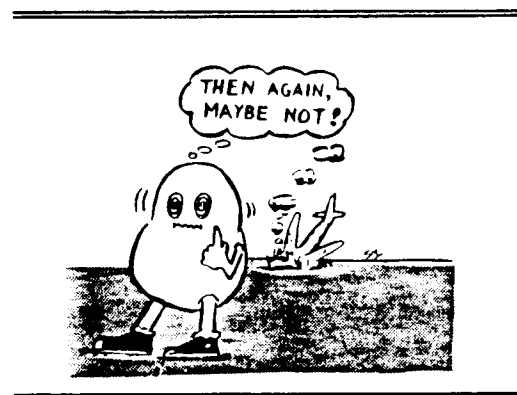
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The learner's prior experiences guide what the learner knows of the environment. For example, you may read an European espionage novel and during the reading, you may have skipped over details of scenery or location. Afterwards, if you take a trip to Europe or study European history for awhile and then reread the novel you will get different meaning from it than you did on the first reading.

Similarly, you may have had the experience of walking into a room in a friend's house that has a particular pattern of wall covering and not noticing the pattern until you are in the process of redecorating your home. In such cases, particular types of prior experiences and knowledge are brought to the forefront and the sampling of relevant cues is guided by those experiences and knowledge.

Background knowledge and prior experiences not only guide how the learner samples from the environment but also the nature of the **predictions** the learner makes about the information, strategies or relations to be learned. For instance, a person who has driven an automobile will make certain predictions about the nature of steering and, unless directed otherwise, would likely use this initial knowledge base to steer an airplane. Upon engaging in the airplane steering experience, the learner would very quickly **confirm** or **revise** these initial predictions. The learner might build upon experiences in steering other vehicles or might draw upon related experiences dealing with the control of the movement of an object through space. Based upon interaction with the steering mechanism, guidance by an experienced pilot and past related experiences, the learner would engage in making hypotheses about steering the plane and would re-sample from the available cues. The outcome of each hypothesis or prediction would result in the generation of both **new hypotheses** and new information, strategies and relations with respect to the steering of a plane.

In dealing with information, the learner makes predictions and tests out those predictions against the reality of the environment. The learner is constantly sampling from the environment, selecting out relevant cues and making predictions based upon those cues. The cues are confirmed as relevant or irrelevant in the process of the interaction and new predictions and hypotheses are then made.



## SOMETHING TO TRY

*Read the following line:*

**Mary had a little lamb.**

*Now read this line:*

**She ate it with mint jelly.**

*Why is the second sentence so disconcerting? How did your prior knowledge and predictions influence what you read?*

(Edelsky, cited in Altweger et al., 1987)

The personal and social aspects of learning and the strategies used in learning (sampling, predicting, confirming or revising) apply to learning to read and write as well as to other areas of knowledge. But before the specific processes of reading and writing are explored, the nature of print and texts will be examined.

### ***THE NATURE OF PRINT AND TEXTS***

To understand reading and writing processes, it is necessary to consider how the system of written language relates to oral language and the features of written language which make it unique.

#### **The evolution of the alphabetic system**

The Western world uses an alphabetic system for writing. This system evolved over a period of several thousand years. Initially, the writing system from which our system evolved was much like a sequence of pictures. However over time the writing system became more abstract. Logo-type symbols were used followed by symbols which represented the syllables of words and finally the alphabetic system emerged. (Havelock, 1976; Oxenham, 1980)

Because the graphic markings used in the alphabetic system are abstract, it is very easy to see that meaning does not reside in these symbols. The markings represent possible meanings for persons who are familiar with the particular alphabetic system and language being used. An English speaking person is not able to understand Arabic writing because the English speaking person cannot assign meaning to the Arabic symbols. Neither is an English speaking person able to understand much of German writing either, even though

the two languages use alphabetic systems. This is because clusters of letters have different potential meanings in German and English.

### The relation of print and oral language

Because oral language historically preceded written language, there is a tendency to think that written language is merely oral language written down. However, this view is inadequate.

To understand the relationship of oral language and print it is necessary to look at the functions each serves. Once a sentence is spoken, it has to be re-uttered by someone in order to be transmitted again. If a sentence is written, it can be examined over and over again at times and by persons the writer may never have imagined. Written language overcomes both time and distance.

Alternatively, oral language makes use of pitch, tone, stress, facial gesture and the context. If a person is angry, that person does not need to state this (although a person might do so to emphasize his/her wrath). One can point to something in the environment and never refer to what it is but yet can have an extensive conversation about it. Written language uses specific words and punctuation for some of these features but even then it is quite limited as the story below will illustrate --

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#### Chinese

人

human  
being

木

wood

言

word

Logographic

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#### Cherokee

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o

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so

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kwo

Syllabic

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b

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Alphabetic

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### The Sadlamation Point

*A young student who found the existing punctuation symbols insufficient for his purposes invented the "sadlamation point" and wrote about it to a professor he knew --*

"Dr. Yetta Goodman

I've invented a new punctuation mark. A mark for something sad. It is used in a sentence like this. I had a dog, it died ☹ It does look funny but it will get better looking soon just like all the others.

Mrs. Nelson's student Bill"

(Goodman, 1985)

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## The relationship of sound to print

Pitch, stress and tone are all features of oral language which are difficult to convey exactly in written language. Besides these features, there is also considerable variation in the way in which individual words are said. Much of the variation in the way in which words are said occurs around the vowel sounds of words. For most languages this variation occurs at a global level as well as at a regional level. The word "calm" will be said differently by persons from Scotland, England, Canada, Australia and the United States. It will also be said quite differently by persons from different regions of these countries.

Despite this great variation in oral language, in the English language the spellings of words do not change as a result of the way an individual says a word. Canadian, American and British dictionaries may vary somewhat on the spellings of certain words but, for the most part, the spelling of words remains consistent regardless of how the words are said.

### SOMETHING TO TRY

*Say these words aloud:*

**been, bean, bin, Ben, Being.**

*Which ones sound the same?*

*Ask a friend to do the same. Compare.*

*Depending on the dialect, any two or more of these words will sound the same (be homophonous).*

(Based on Goodman, 1982)

Regardless of which word pairs in the task above seemed to sound the same, the spelling of the words will remain invariant among speakers. This stability of written language across dialects has implications for both reading and writing. It means that reading and writing instructional approaches that rely on sound as the sole cuing mechanism, are based on the naive assumption that written language is merely sound transcribed into print. Additional cuing systems which work together in reading and writing will be discussed later in the section on the reading and writing process.

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## How texts are organized

Within specific languages, there are conventions that relate to the organization of print. For instance, a well known convention in the English language is that the letter "q" must be followed by "u". These conventions arise for different reasons. Some have to do with something as simple as a printer preferring to place an "e" at the ends of words ending with "v" so that they would be easily distinguished from words ending with "w".

### SOMETHING TO TRY

*Certain combinations of letters occur infrequently in our language.*

Can you think of a word that rhymes with orange?

*Why is this difficult to do?*

[CLUE: Think of the derivation of the word and how it affects English.]

Other conventions relate to the tendency in English to graphically preserve the semantic connection to the root or base of a word. This is demonstrated by the words *site*, *situate*, and *situation* or the words *scribe* and *script*. Although the pronunciation of the root or base varies, the vowel spelling (i) is maintained.

Besides conventions relating to letter arrangement in words, there are conventions relating to the arrangement of words into sentences. The rules of grammar, or syntax, govern how words may be arranged into sentences. For instance, we know that a determiner (e.g. *the*) cannot be placed before a verb as the sentence below illustrates --

*We the went to school.*

Conventions also apply to how sentences are arranged in texts. This area has been investigated in depth relatively recently. Writers appear to use specific devices when writing texts to make them cohesive. For instance, once a character is introduced in a story, the author will use certain words (such as *she*, *her*) to refer back to that character thereby unifying the text.



## SOMETHING TO TRY

*Look at the following arrangements of sentences and decide which is best.*

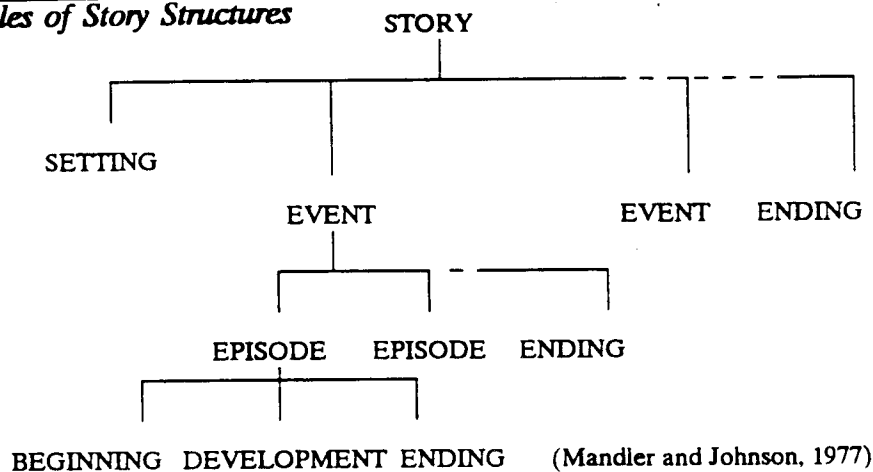
1. Mary had a little lamb.  
Her fleece was white as snow.  
Everywhere that Mary went,  
the lamb was sure to go.
  
2. Her fleece was white as snow.  
Mary had a little lamb.  
Everywhere that Mary went,  
the lamb was sure to go.
  
3. Everywhere that Mary went,  
the lamb was sure to go.  
Mary had a little lamb.  
Her fleece was white as snow.

*Think about how you would explain the basis for your decision to a colleague.*

*What does this tell you about how texts are held together?*

In addition, it appears that texts have certain general structures. Examples of the general structure of a narrative story are outlined below. These examples highlight that even though different researchers have varied opinions on text structures, the text structures they propose usually share a number of elements in common.

### *Two Examples of Story Structures*



[(Placement<sup>^</sup>) Initiating Event<sup>^</sup>] Sequent Event<sup>^</sup> Final Event<sup>^</sup>  
 [<sup>^</sup>(Finale).(Moral)]

(Hasan, 1984, p. 18)

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Although the rules for stringing sentences together to make texts have not been recognized as explicit conventions, there is research evidence to suggest that when stories are presented which violate these conventions, they will be recalled in a conventional manner.

Written language is far from simple. There are many layers of convention surrounding it. The relationship of the sound and nature of oral language to print and the manner in which words are organized into texts each have their own conventions. However, like the oral language that most of us effortlessly acquire, written language is a tool for our use. The processes of reading and writing are psychological processes around a set of symbols which our society has created.

### ***THE READING PROCESS***

To discuss how the reading process occurs, we must bring forward the learning strategies discussed earlier as part of the learning process and we must relate these to the material which is the centre of the reading process -- the text. The key strategies involved in the reading process are: initiating, sampling, predicting, confirming, and terminating. There are other types of strategies which may be subsumed under these. For instance, inferencing may be part of the predicting strategy. A general description of these strategies is presented below.

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### **STRATEGIES**

- INITIATING:** The reader begins the act of reading. A book is opened, a sign is gazed upon, a bank statement is reviewed.
- SAMPLING:** The reader samples from the available cues -- graphophonic, syntactic, semantic, pragmatic.
- PREDICTING:** The reader makes predictions based on background knowledge relating to each of the cuing systems.
- CONFIRMING:** The reader confirms the predictions based upon what follows (and what has been sampled from). Part of this confirming process may include revising or correcting the earlier predictions where necessary.
- TERMINATING:** The reader has the option to terminate the reading process at any time.

(Based on Goodman, Watson, Burke, 1987)

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The nature of print determines the cuing systems that are available for the reader to sample. These cuing systems are: the graphophonic system, the syntactic cuing system, the semantic cuing system and the pragmatic system. In reading, the cuing systems work

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together. In fact, written language would fail to be written language unless all the cuing systems are working together.

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## CUING SYSTEMS

**GRAPHOPHONIC:** The cues in this system are the shape and potential sound representation of words. The order of letters in words is included in this category.

**SYNTACTIC:** This is the grammatical system of the language being read.

**SEMANTIC:** The cues in this system are the meanings of the language - that is, the cues which make the language a sensible, meaningful system to its users.

**PRAGMATIC:** This system includes cues which relate to how language is used. For instance, it may relate to the general structure of a story, the appropriateness of certain words in the story, etc.

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### A Hypothetical Example of What Happens during Reading

To demonstrate the reading process at work, we can think through the reading of a line of text from a fairy tale. The line that will be used as an example comes from a children's version of the fairy tale *Cinderella* (1962, *Five Fairy Tales*. Toronto: Musson Book Company). This tale was selected because it is familiar to most of us and therefore would not have to be reproduced in full in order to describe the reading process.

The reader initiates the reading at the beginning of the story and reads along the text. The reader very quickly is aware that the story is of the fairy tale genre since the pictures and language are similar to those used in prior experiences with this particular genre. These prior experiences need not be reading experiences but could be listening experiences or listening and viewing experiences (as in television). Such experiences allow the reader to make predictions about the range of possibilities in the story which would be consistent with the genre. For instance, the reader subconsciously would know that most fairy tales have a story structure containing one or more event sequences in which a problem is encountered, a goal is set by one of the characters, and there is some resolution.

The reader also knows that certain kinds of words are more likely to appear than other kinds of words. For instance, except in the case of modern fairy tales, the reader would be surprised to encounter words like laser-gun or space craft. In fact the reader would likely expect words like princess, wicked witch, spell, dragon, magic wand and so on. The reader, in beginning to read the selection, is not surprised to encounter the phrase "Once upon a time...". Depending on prior experiences with fairy tales, the reader also anticipates certain syntactic patterns like "ugly old clothes" [two modifiers before a noun].

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The reader knows, on a subconscious level, that sampling from print while reading along is a highly selective process. For instance, the reader knows that it is not necessary to examine every feature of every word in order to read. Other cuing systems help narrow the possibilities of what words might be.

Within the graphophonic cuing system, the reader knows that a great deal of information is contained at the beginnings and ends of words. The information contained at the ends of words is often connected to the grammatical function of the word and therefore provides an additional cue. Although the reader is aware of reading a specific word, information is continuously being received from the visual field around the word. This information serves both a sampling function forming the basis for more predictions and a confirming function for what has been already read.



Let's suppose that the reader has proceeded through the story to the point at which Cinderella's sisters have already left in their finery for the ball. The pumpkin, mice and rat have been changed into a carriage, horses, and a footman by the fairy godmother. The next sentence begins as follows:

Then she touched Cinderella's raggedy old dress with her \_\_\_\_\_,

The reader comes to a couple of words that are not immediately known. The reader implicitly knows the following kinds of information based on background knowledge:

a) *SYNTACTIC CUING SYSTEM*

The word following *her* must be either a noun or an adjective. Since there are two words that are unknown and the second is followed by a comma, it is likely that the first word is an adjective and the second is a noun. Another possibility for some readers might be that the first word is a noun and the second an adverb since adverbs are highly movable.

b) *SEMANTIC CUING SYSTEM*

Given the information provided in the story up to this point and the pictorial support, the reader knows that the fairy godmother will touch Cinderella's dress with either her hand or with the small stick depicted in the illustration. Depending on the reader's experience with this type of story genre, the reader will know that the stick is called a wand. Given the fact that the wand had already been used to change the pumpkin, mice and rat into carriage, horses and footmen, the reader can predict that the wand works magic.

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c) *GRAPHOPHONIC CUING SYSTEM*

If the cues available from the graphophonic cuing system are inserted (i.e., "magic wand") they provide additional information to support the prediction. In fact, the reader likely needs to sample only the **m** and the **w** to support the prediction since the possibilities presented through the simultaneously presented cues of the semantic and syntactic, and pragmatic cuing systems have already limited the range of possibilities for the prediction.

d) *PRAGMATIC CUING SYSTEM*

As discussed above, the cues relating to possible language options within the fairy tale genre provide information relating to both the syntactic and semantic cuing systems. If we go back to our sentence, we find that we still are in the midst of it. We have only read as far as "magic wand" --

Then she touched Cinderella's raggedy old dress with her magic wand, and suddenly Cinderella was wearing a beautiful ball gown.

We can use the remaining sentence information to confirm our predictions. We may also scan ahead to that information. When we read along, we find the word **suddenly** and we find that Cinderella, described earlier as wearing a **raggedy old dress** is now wearing a **beautiful ball gown**. A instantaneous transformation has occurred confirming that the prediction of **magic wand** was an appropriate one.

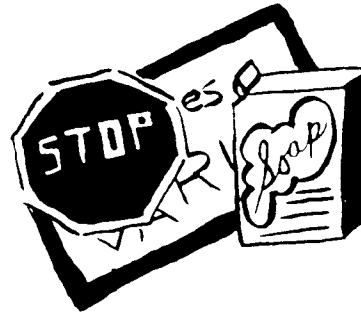
The reading process is **not simple**. The example above describes only one possibility of how the process might work for one reader. The reader coordinates many cues and a great deal of information. The reader knows quite a lot when setting about to read. In fact, what the reader knows determines to a large extent how the author's message is construed.

**What about so-called beginners – how does the process work for them?**

In discussions of reading, there is a tendency to equate entrance into school with reading and writing. Indeed, entering Kindergarten does mark the beginning of formal instruction. However, most children have a great deal of information about print before they enter school. We live in a print oriented society. There is print on the labels of most products used in the home. Bills and receipts are written out. Income tax, memberships in clubs, employment and unemployment applications, advertisements, catalogues, street, business, and community signs all use print.

Children are part of this environment and, as such, see that the graphic markings on paper have significance to people in their environment. Through interactions with others around print, children very early in their development begin to hypothesize about print. Signs, or logos, are given very specific meanings by children who are trying to make sense of their world. In urban settings, the "Golden Arches" symbol for Mcdonald's very quickly comes to represent hamburger or chips. The Pepsi or Brookfield's symbol on the local

shopkeeper's sign quickly comes to represent a chocolate bar or an ice cream or some favorite food --things which have personal meanings for the children. If the Tide label is shown to children they may indicate that it says "tergent" [detergent]. If the Matchless label is shown, they may say it says "paint". If the Ivory label is shown, they may say that this says "soap". In other words, children learn that the graphic markings of print can represent a certain meaning.



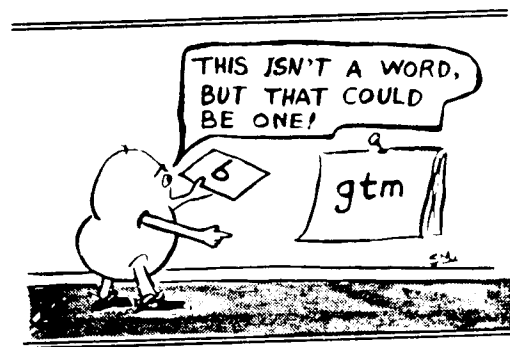
Children's preschool knowledge of print extends well beyond this. Research has indicated that children make many hypotheses about print before ever passing through the school doors. These hypotheses, of course, depend upon the experiences that the children have had.

### Examples of Early Hypotheses about the Graphic System

The work of Ferreiro and Teberosky (1982) has given us a great deal of insight into the knowledge of young children.

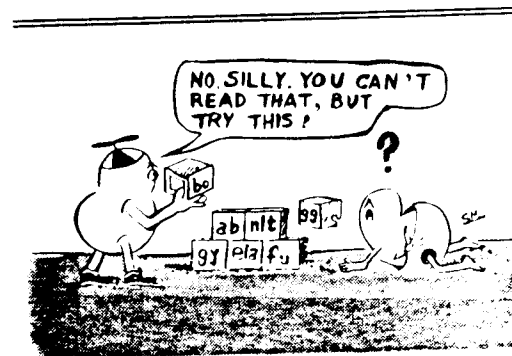
Very young children make hypotheses about whether groups of letters are readable. They move from randomly deciding that certain letter clusters are readable to deciding that there must be at least two letters for something to be readable.

ab (readable)  
e (not readable)



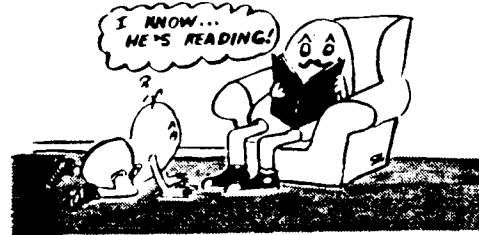
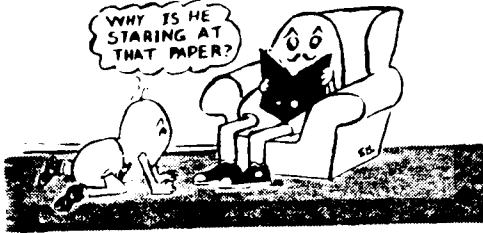
Children also hypothesize that for something to be readable there must be a variety of letters.

ggg (not readable)  
bo (readable)

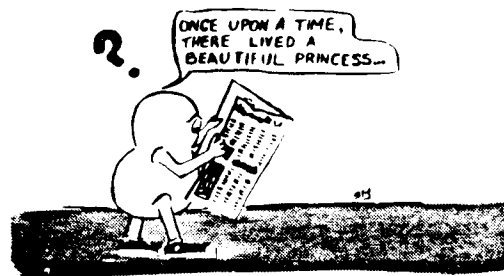


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Children first seem to think that a person is reading only when they are orally reading. They then move to a point where they know that reading silently is different from leafing through the pages of a book.



Initially, children will not know whether what is read from a newspaper should differ from what is read from a fairy tale book. Gradually they begin to make this distinction and will show surprise if a person holds a fairy tale book and reads of a traffic accident.



Children initially do not distinguish whether the picture or the print is what is to be read. They move to hypothesizing that the text is a label for the picture or a sentence relating to the picture. They then begin to focus more on the graphic elements of the print.

In texts which do not have pictures, children initially think that only the names of objects or persons can be represented. They gradually extend this hypothesis to include verbs, then adverbs and adjectives and finally articles.

There is much more about young children's early awareness of print that has yet to be discovered. However, from what is known, we can say that upon entering school many children already have an awareness of the structure of stories and about some of the ways in which print represents language. To illustrate this point, consider the case of the three year-old who had just listened to her mother read a bedtime story and wasn't quite ready to go to sleep. She asked her mother to tell a story about when she (the mother) was a little girl. The mother began, "Once upon a time ...". Her daughter interrupted and explained impatiently, "When you're telling a story that's true, you don't say 'Once upon a time', you just start with the story."

The basic process is the same for the so-called beginner as it is for the proficient reader. That is, based upon knowledge and experiences with print and with a variety of stories, the child can begin to make predictions based on those experiences. The child's sampling strategies are also based on this background knowledge. The beginning reader, then, is not really a beginner after all but has a great deal to bring to the activity of reading.

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In school, the teacher may play a strong role in mediating the reading experience through confirming predictions or focusing attention on specific cues. However, the child is continuously incorporating that knowledge and the knowledge gained from personal interactions with print in order to make new hypotheses which form the basis of new learning.

### ***THE WRITING PROCESS***

Writing is the production of signs. As such, it is governed by convention. Convention, in turn, dictates to a large degree which symbols may represent which meanings, the order that words must follow (syntax) and certain overall organizational patterns for thought (story structures).

Like reading, writing is personally and socially learned. The young writer can explore the world of graphic markings independently and can learn about convention through socially mediated activities involving more experienced writers and personal interactions around language (such as reading).

Research is only beginning to uncover how it is that we write. Because writing is a generative process, issues of hypothesizing, sampling, predicting and confirming are not as observable as they are in reading. In reading, we can compare the expected response to the observed response by looking at the text. In writing, a writer samples from what that writer has learned about language (syntactically, semantically, graphophonically and pragmatically) and writes based on that sampling. There is no exact text to compare the writing with, other than one which adheres to syntactic and graphophonic conventions and which makes sense.

The writer may hypothesize that certain messages will be conveyed by using certain words and symbols but cannot confirm whether the message achieved at least part of the intended effect unless the writer contacts the reader. In some instances, the writer will never know what meaning potential the message held for readers because of the kinds of knowledge that those readers bring to the text. For instance, the philosopher Descartes, writing well before the advent of computers would never have realized that his words would be important in the artificial intelligence field of cognitive science.

For the young writer, through experiences with persons who act as social mediators or guides, the child can make certain hypotheses about spelling or about punctuation or about the kinds of things that can be represented on paper. Through additional experiences with print or with more experienced writers, the child will come to revise these predictions and move towards convention.

To understand the writing process, we must consider first of all what research is now telling us about how writing emerges in the very young and we must consider a number of influences and factors that have arisen out of past and present instructional practice. Among these issues are: the first draft-only draft phenomenon, invented spelling, process writing, and penmanship.

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## Writing development in young children

Just as we now know that very young children are beginning to hypothesize that print signifies meaning we also now know that young children view print as something that they too can produce. Writing samples from young children show the kinds of hypotheses that they are making about the print system and the relationship of oral language to print.

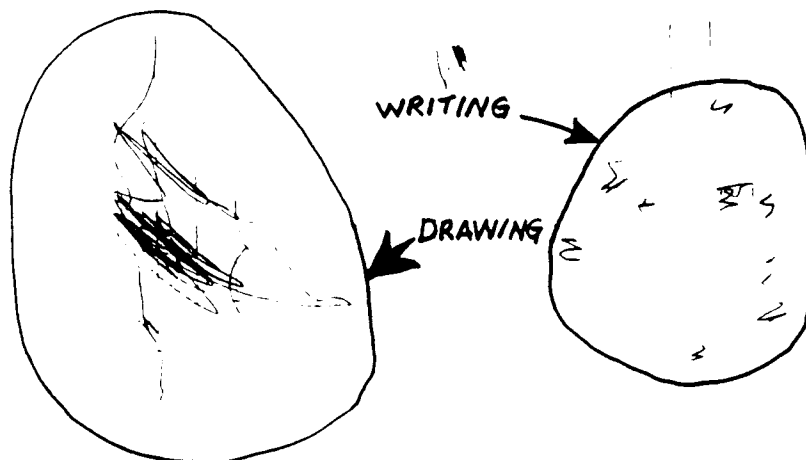
Researchers like Ferreiro and Teberosky (1982) have provided us with a great deal of information on early reading and writing knowledge of children. They suggest that children pass through a series of levels in writing development.

### Qualities of level one.

Preschool children can surprise us with the amount of information they have about print. At first, they represent writing holistically. Print (or writing) may take one form and drawing another.

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### *A Writing Sample From Level One*



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When the writing form is print rather than cursive, they use curved lines and straight lines. When the writing form is cursive, the children make open and curvy characters in a string.

Children seem to have made the hypothesis that writing is something that only the writer can read. In other words, they know that they can read their own writing but they cannot read the writing of others. They are not surprised then that an adult cannot read their writing since they cannot read the adult's writing.


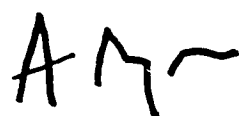
Children are also ferreting out the differences between the graphic forms of writing and drawing. For instance, they initially hypothesize that written strings should be proportional to things like the size or the age of the person being written about rather than the name per se. Consequently, if a child is writing about "daddy" the letter markings will be big but if writing about "baby" the letter markings would be small. The size of the object determines the size of the markings.

Qualities of level two.

At this level children seem to have discovered that the graphic marks must be different for different things to be read. For instance, they would realize that if they had represented the word **dog** with three sticks the word **cat** could not be represented by the same three sticks.

Children also begin to use the same form to consistently represent a specific meaning. For instance, they might represent their name consistently across several instances as a circle and three sticks. At this point children may opt to write only from models (ie. copy) or to use their own stable forms to generate new words.

*An Example of Level Two*

 dog	 cat
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Qualities of level three.

At this level children make the hypothesis that each marking that is written stands for a syllable -- the syllabic hypothesis. For instance, if the word being written is a two syllable word, two marks will be made, one for each syllable.

*A Writing Sample from Level Three*

M N A T  
Could you please put  
b h u n  
Cur----- i -----ous George  
and the yell - ow  
hat on

---

The Level Three writing sample on the previous page demonstrates how closely children may adhere to the syllabic principle. The draft as it appears above has a slight editorial change which makes it different than the first draft. The sample was obtained when a young girl was complaining about the fact that the cartoon "Curious George" was no longer on television. When her mother suggested that she write the television station, she set about to do so. As she was writing, the girl talked aloud about what she was writing. In the excitement of letter-writing, the girl was one mark short of making the story perfectly syllabic -- the word "on" had no mark to represent it. When the girl re-read what she had written she was a little puzzled as to why there weren't enough marks. She solved her problem by adding another squiggly mark at the end in order to make the letter perfectly syllabic.

#### Qualities of level four.

Given that children are also operating on the hypotheses that something cannot be a word unless it has two or more letters and that there must be variety in these letters, they very soon discover that there is conflict among hypotheses. Because of this conflict among hypotheses, they now move towards resolving this by hypothesizing that there must be a level of representation smaller than the syllable. They now work on an alphabetic-syllabic hypothesis.

#### Qualities of level five.

At this point, children have reached the alphabetic hypothesis. They understand that each syllable has sound values which are represented. Once at the alphabetic level, children begin to explore conventions relating to their language which are not sound-based (e.g. they may add "e" onto the ends of words because they have observed that it is placed on some words even though there is no sound assigned to the letter).

### **Development in the alphabetic period**

For many children, the alphabetic period coincides with the first few years of school. As it happens, direct instruction in reading and writing occurs during this period as well. Consequently, much of what we now know about the alphabetic period is related to how to teach writing rather than how we learn to write.

Preliminary investigations into the learning of writing reveals similarities between the alphabetic and pre-alphabetic periods. The young writer is still hypothesizing about print and, if given the opportunity, will still continue to explore print forms and functions.

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## Knowledge of genre

Children also show very early control of text organization in relation to genre. For instance, children will write lists differently than stories or personal letters. Young children tend to produce several different types of narratives (Heath, 1986). The different types of narratives which are found in the oral language of some children also guide their production of written work. Examples of different narrative types are presented below.

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### Examples of Narrative Types

- Recounts** -- In recounting, there is often little logical relationship among the things being recounted. This type of narrative is often used for school tasks but is not much used outside this context (except by school-oriented families). (e.g. What happened on your holidays?)
- Eventcasts** -- Young children may explain something that is being discussed or is currently on-going.
- Accounts** -- Spontaneous sharing of experiences by young children ( You know what ...?)
- Stories** -- These have a well known structure and include fictionalized elements.
- 

In schools, the type of writing task assigned may influence the amount of difficulty children have with the task assigned. The familiar assignment of "What did you do on your summer holidays" would be a recount according to the chart above. Since children might not understand that this request really means "tell me about a specific incident that happened to you when you were on your holidays" they may produce a sequence of seemingly unrelated sentences. Time, and not a sequence of interrelated events, seems to be the element that holds together the topic of "What did you do on your summer holidays". Fragmented writing is to be expected if the students take this particular task literally.

## Knowledge of spelling

Students hypothesize about sounds moving from the most to the least predictable. Predictability is related to written features such as variability in consonant sounds (e.g., c/s), the role of the letter **h**, vowel sounds and their print representations, specific vowel/consonant combinations, and the role of the apostrophe.

If students get opportunities to write and to edit their own work, it is more likely that they will begin to use unusual words not included in spelling lists. Over time, they will move towards convention in spelling these and other words.

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Some spelling features will undergo spurts of change while others seem to remain fairly constant. For some children, it is clear that aspects of writing development parallel that of oral language development. First, children appear to use a form correctly; they then overgeneralize the hypotheses they have created and thus make errors on forms which are exceptions to the rule for one reason or another; then they narrow and refine their hypotheses so that they are writing words conventionally.

### Knowledge of punctuation

Although the intonational features of oral language are among the first to be focused upon by the child learning language, the marking of these features through punctuation in written language is much more difficult. Punctuation marks attempt to convey some of the essence of pitch and intonation in oral language. However, they fail to convey all that oral language has to offer. An exclamation point at the end of a sentence gives some insight into how the sentence is to be said but accompanying words like *sarcastically*, *joyfully*, or *angrily* must be added to specify some indication of the tone used.

Many punctuation marks serve a confirmatory role in writing. That is, the question mark will often merely confirm that what has gone before is a question. Although common question forms like "Who" "What" "When" "Where" and "How" or subject/verb reversal (e.g., Is Bob going home?) may be easily recognizable, they are not the only ways of asking questions as the example below illustrates.

*"You are going there?" asked Jean.*

Because the regularity in punctuation is difficult to discern and because it constitutes a unique system which differs from oral language, children may find it that much harder to form hypotheses and generalizations about punctuation. Of course, opportunities for written language use are also a factor in the development of insights into punctuation use.

### Knowledge of cohesive devices

Children again appear to develop increasingly sophisticated ways to maintain unity in their text. They are continually refining the idea of the audience in writing. Unlike oral language, writing is removed from context and may be removed from the intended audience. Therefore, information must be made more precise. It is insufficient to write the sentence, "Put that there." without specifying the "that" and the "there". Other difficulties are encountered in trying to control pronoun referents in relation to the number of characters in a story. The writer may know which *him* or *her* is being referred to in a sentence but has the obligation to make this clear to the reader.

In the case of writing, then it is extremely important that young children have opportunities to interact with their audiences so that they can begin to make hypotheses about what works and what doesn't in getting across a message. Some of these subtle aspects of writing continue developing well into adulthood.

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## Instructional issues relating to writing

If the child is continually developing towards convention, where does teaching fit? As noted earlier, teaching is extremely important because of its role in the construction of social knowledge. The role of teaching will be discussed further under the strategies section of this handbook. However, because so much of the focus in writing has been on instruction rather than development, some questions relating to writing instruction will be discussed.

### First-draft/only draft

Only in recent years has the importance of multiple drafts and revision of documents been recognized. For many years, there was a tendency to consider the first draft as the only draft. Along with this went ideas that spelling must be correct, grammar perfect, writing legible and the text itself cohesive and well constructed.

There was a sense that writing was like knowing the names of the capitals of all the provinces -- you were either right or wrong. There was also a strong sense of the influence of teaching without giving much consideration to exactly what it was that the learner was doing. Consequently, spelling and writing were presented as things to be learned rather than processes to be explored and developed. Children may well have learned to place punctuation appropriately in a grammar exercise or to get all the words correct on their spelling test, but what happened in their real writing was often another issue.

Current theory suggests that revision is often an important process to go through if **the writing is intended to be shared with others**. In addition, it appears that the mechanics of language will be applied in context if they are learned in context. Individual conferencing sessions with students and group editorial sessions relating to writing are techniques which capitalize upon making writing experiences as meaningful as possible. Further information on the intermediate teacher's role in this process can be found in **Intermediate English: A Curriculum Guide** and Nancie Atwell's **In the Middle - Reading, Writing and Learning with Adolescents**.

### Invented spelling

As the discussion on learning and the writing process indicates, children are considering what writing can do well before they enter school. They are making their own hypotheses about what writing is and what writing can do. We now know that children's invented spellings are far from random.

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A child who writes *sdr* for **star** is being very systematic. We now know from linguistics that the child is monitoring the articulatory system. Both **t** and **d** are made in the same place in the mouth and both are made in the same manner (both are alveolar stops). The only difference is that **t** is voiceless and **d** is voiced. In other words, the child is very close to refining his or her hypotheses about the spelling of the word **star**.

The teacher's role is to provide opportunities for children to read and write. Through such opportunities children can explore the relationship of the graphic and sound systems and the conventions which English language has adopted over its relatively short history. The teacher's role of giving appropriate direction in comparing words or in questioning a student in the context of a writing activity must also be maintained.

### Process writing

Through the efforts of Donald Graves, Lucy Calkins and others, there is now a strong emphasis on process writing as a method of teaching writing. Process writing clearly operates under the assumption that the first draft is not likely to be the only draft. Rather, it recognizes that writing is an exploratory process. Process writing is a systematic manner of recognizing that not all writing need be shared -- that is, some writing is personal and not intended for publication. Process writing also provides a systematic manner to create writing that is to be shared. It puts in place **opportunities** for pre-writing preparation, draft(s), revising, editing, and publishing. It forces children to examine their own writing and the writing of others through joint editorial teams and through responding to the writing of their peers. In other words, it helps develop the sense of audience referred to earlier. Process writing is currently emphasized in the schools in our province through the guides **Language Growth** and **English The Intermediate School**. Process writing is even more important for children experiencing difficulties in writing because it gives them opportunities to explore language in use and share in the ideas of their peers.

### Penmanship

Debates rage over the idea of penmanship. When considering this topic there are two points to consider -- legibility and efficiency. The goals of writing are both personal and social -- information that is written is to be shared either with oneself or with others. Consequently, writing must be able to be read. On the other hand, writing need not be so precise that it consumes a great deal of time to produce written text. **Purpose will determine the weight given to each of these features in the production of a piece of writing.**

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The student's penmanship skills should be both efficient and effective. Difficulty in forming letters can interfere with the writer's efforts to concentrate on the message, intended audience or surface features. Copying pages of worksheets is no longer relied upon as the only means of developing penmanship since such laborious drills are removed from the generativity of writing. Neither does opportunity for personal writing always develop practical penmanship. In both cases, the student can develop inefficient ways to make or join letters. While it must be recognized that the teacher's way is not the only way to write, the student does need demonstration and guidance of correct letter formation and meaningful opportunities to use this developing writing skill. Such demonstration can include times when the student is clearly in need of assistance. Quite often this demonstration may come within the context of a writing activity or it may come in the revising or editing segment of process writing. Individual preferences for writing are often a way of personalizing a piece of writing. As long as the writing maintains the legibility/ efficiency balance fairly well, then individual writing styles should not pose any instructional problem.

Finally, it must also be noted that there are degrees of legibility which are satisfactory on a personal basis but not on a social basis. Quite often, one can read one's own writing but another person is unable to read it. The issue of the degree of legibility then relates to whether the writing was intended to be shared. At times, personal writing may sacrifice wide-ranging legibility in order to maximize on getting ideas down efficiently. In such a case, revision would be in order if the piece of writing is intended to serve a wider audience.

## *SECTION TWO SUMMARY*

This section briefly reviewed the following points:

- the general process of learning and the characteristics of print as a symbol system
- the processes of reading and writing for beginning as well as what could be termed more advanced readers and writers



## **THE PRINCIPAL'S FILE -- FILE TWO**

As leader of education within the school, the principal has the opportunity to be a catalyst for innovation and a supporter of quality educational practices. Guides, handbooks, professional journals and books are among the many sources that can be used both to affirm current practices that seem effective and to develop new insights from some of the "ordinary" events of school. In the field of literacy education, insights from cognitive psychology and linguistics have resulted in a knowledge explosion. Teachers cannot be expected to become linguists or psychologists overnight, but, with the principal's leadership, they can be expected to consider the instructional implications of the following principles:

All students are constantly making hypotheses about their world. They learn what works and for what purposes.

Sometimes students learn what works for school purposes and they miss the essence of what has to be learned because no purpose is given other than a school purpose.

The world of print has numerous patterns in it but these patterns are quite complex.

Students cannot be given simplistic rules to understand a complex phenomenon.

Learners learn by doing, by being immersed in learning for real purposes.

Learning by doing should not be extended to mean completing exercises or workbook sheets. Rather it means being able to explore language and generate it.

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### **SOME STRATEGIES TO CONSIDER:**

At a staff meeting, ask a staff member who has recently completed a course on reading, writing or language arts to report on one or two insights gained from the course or ask a teacher to bring in the texts used for the course and report to the staff on what was valuable in them. You might consider following up on this by ordering these texts as professional resources for the school.

Try one of the activities like the dialect activity in the section on **LEARNING AND THE NATURE OF PRINT** to help teachers explore how dialects vary even though they might not have predicted such a wide variability.

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