

CHILDREN TALK THEIR WAY INTO LITERACY

Gordon Wells
University of California, Santa Cruz

In a literate society, everyone needs to read and write. For some, it is essential for their occupation; for some a form of entertainment; for all, reading and writing are necessary for the transactions of everyday life. It is disturbing, therefore, to know that in contemporary societies there are still many adults who are not sufficiently literate to manage these tasks at a level adequate to their needs. Since the teaching of literacy is one of the major goals of schooling, which is compulsory for all children, it seems reasonable to argue that the fault must lie in the way in which literacy is taught. And, indeed, in many of the world's industrialized countries, new curricula and stricter accountability procedures have been introduced in recent years in attempts to overcome this problem. In many cases, however, the policies that are being implemented, rather than remedying the problem, seem likely to further exacerbate it.

In many schools today, reading and writing are treated as ends in themselves and children are given tasks to perform that focus on the "mechanics" of literacy as a set of skills to be mastered quite independently of their immediate use for communicating and thinking about issues that are of intrinsic interest and importance to them. In this context, it is therefore important to reemphasize Vygotsky's argument that "teaching should be organized in such a way that reading and writing are necessary for something ... Writing should be incorporated into a task that is relevant and necessary for life" (1978, pp.117-118).

In this chapter, therefore, I shall focus first on some of the ways in which reading and writing are embedded in the activities in which many children engage in their lives outside school. Here, my focus will be on the ways in which written texts are interwoven with other modes of meaning making in order to achieve goals that are meaningful to them. Then, in the second part of the chapter, I shall consider how the principles that can be derived from meaning making outside school can be incorporated into the activities through which the school curriculum is enacted. Throughout, I shall draw attention to the intimate and interdependent relationship between written texts and the action and talk in which they are embedded.

Reading and Writing in Relation to Other Modes of Meaning Making

The characteristic that has enabled humans, as a species, to survive and prosper is the disposition and ability to collaborate in solving the problems they encounter. More than a million years ago, before speech had developed, this ability already existed in the form of

"mimetic" communication, as can be deduced from archeological and other evidence (Donald, 1991). Proto-humans lived in small bands that built shelters and hunted together and were able to pass on these knowledgeable skills to their offspring through demonstrative action and gesture. With the advent of speech about 50,000 years ago, the ability to communicate was greatly enhanced, as were the functions that joint meaning-making served, such as planning and reflecting on action, handing on tribal lore and specialist knowledge, and constructing (mythical) accounts of creation and humans' place in the "grand scheme of things." It is important to note, though, that speech did not supersede mimetic communication. Rather, they complemented each other as means to the achievement of shared goals - just as they continue to do today in a wide variety of everyday activities.

On this cultural-historical time-scale, the invention of writing is very recent - a mere 4,000 years old - and its use (together with graphical and algebraic forms of notation) as a specialist toolkit for the development and application of theory in the natural and human sciences is much more recent still (Halliday & Martin, 1993). Writing has two great advantages as a way of representing meaning: it enables meaning to be preserved in a permanent form so that it is available to readers in other times and places - and also to the writer as a critical reader and reviser of his or her own text; and second, the genres that have been developed in different specialist fields allow complex structures of meaning to be articulated more precisely than is commonly possible in everyday conversation. For these two reasons, the dialogue in which knowledge is created and extended is frequently conducted in the written mode, as is the provision of information of official kinds in domains such as law, health services and civil administration. Clearly, therefore, it is important for all citizens to master the "genres of power" employed in written communication (Christie & Martin, 1997).

However, just as speech did not replace the mimetic mode of communication, neither has writing rendered speech obsolete, even in those domains where the written text is most widely used. Prior to writing, authors frequently discuss their intentions with colleagues and friends in order to develop and clarify their plans; during the actual drafting and redrafting of the text, they also seek readers' reactions and suggestions for revision. Readers, too, often discuss what they have read in order to compare their interpretations and responses, particularly if the text calls for some form of action; this is particularly common when the text contains diagrams, graphs or mathematical or other symbolic formulae. In other words, although the written text can stand alone, relatively independent of any particular context of use, particular activities of writing and reading remain enmeshed in a nexus of action, talk and text.

Reading and Writing at Home

The sequence of development I have just sketched in relation to the history of the human species is typically repeated in the development of each individual (Wells, 1999). First meanings are exchanged by means of action and gesture; when speech develops, it continues to be accompanied and supported by non-verbal behavior. And for those

children who first encounter reading and writing at home, these activities typically occur in the context of social interaction and as part of some larger purposeful activity .

Being read to is probably most children's introduction to written language. Many parents include reading a story as part of the bedtime ritual; they also choose to share a picture storybook or an illustrated magazine at other times when the child is upset or bored. Some adults start reading to their child in the first weeks after birth - or even before birth! The value of this practice in preparing children to succeed in their formal education is now well attested. For example, one of the most striking findings from the Bristol Study of Language Development was that the frequency with which children were read to during the pre-school years strongly predicted not only their knowledge of literacy on entry to school but also their overall academic attainment five years later, at age ten (Wells, 1986).

The benefits of being read to are many. First, from listening to stories read aloud, children become familiar with the cadences of written language and the generic structure of stories and other types of text. They also increase their vocabularies in domains that are rarely the subject of everyday talk. And, equally important, they learn that books are a source of interest and enjoyment that can introduce them to real as well as imaginary objects, and places and events that they do not encounter in their immediate environment. In all these ways, the practice of reading to children in the early years enlarges their experience in ways that prepare them to make the most of the instruction they will receive in school.

Listening to a story or non-fiction book is only part of this valuable practice, however. Much of the benefit - as well as of the child's enjoyment - comes from the talk that accompanies the sharing of the book. Discussing the characters and their actions, predicting what is likely to happen next, clarifying the meaning of particular words and phrases - all these kinds of talk help the child to make connections between the meanings and language forms of the text and his or her actual experiences, including the use of language in other familiar contexts. As the child gets older, talk about the text typically begins to include attention to the written representation itself - the visual appearance of interesting words and the forms of the letters and their correspondence to the sounds of speech. Described technically as "phonemic awareness", the knowledge about the relationship between spoken and written language that a child gains in this way is certainly an important aspect of becoming literate; indeed, it is argued by some to be a prerequisite for learning to read and write.

There has been some interesting research on the different ways in which parents talk with their children about the books they read together (Dale et al., 1996; Heath, 1983). Some parents, unfortunately, seem to think that they should quiz the children about the "facts" of the story or deliberately teach the letter names and sounds . But where the adult is willing to follow the child's lead, the talk frequently takes the form of more open-ended exploration of what the child finds interesting in the story and, in this way, as in other activities, this helps the adult to provide the sort of information that the child wants or needs (Tizard & Hughes, 1984).

Here is one of my favorite examples of a shared story reading. It was recorded when the child was three years old. At his mother's invitation, David chooses a picture storybook, *The Giant Jam Sandwich*, which he has obviously had read to him before, and sits next to his mother on the sofa so that he can see the book as she reads.

David: The Giant Sandwich

[4-second pause]

Mother: Who's this here on the first page?

David: The wasps.

Mother: The wasps are coming. [Turns the page]

Here's some more, look. Wow!

[Reads] One hot summer in Itching Down
Four million wasps flew into town.

David: I don't like wasps . . . flying into town.

Mother: Why's that?

David: Because they sting me.

Mother: Do they?

David: Mm. I don't like them.

Mother: They won't sting you. But four million would be rather a lot, wouldn't it?
They'd get rather in the way.

[Reads] They drove the picnickers away . . .



As his mother turns to the next page, David looks intently at the illustration, which shows three male inhabitants of Itching Down, each attempting in his own way to get rid of the wasps (see above).

David: Is that a spray to shoo them away? Is that a spray to shoo them away?

Mother: Yes. It's probably some sort of insecticide . to get rid of them.
And what's that net for, do you think? [A butterfly net]

David: It's for catching them with.

Mother: It doesn't seem to be much good though, does it?

David: No. They come out the holes.

Mother [laughs]: The holes are too big, aren't they? And what about this man?
What's he got?

David: He's—What's he got?

Mother: What's that?

David: A note. What does the note say?

Mother: A note on a stick, is it? Is that what you think?

David: Actually it's a sound.

Mother: A what?

David: A sound.
What's it called on the—on the stick? What is it? What's that man got?

Mother: Well you know, um—

David: Yes . . Sign.

Mother: You think it's a sign? Yes it looks very like a sign with writing, doesn't it?

David: Yes.

Mother: But it isn't. It's like Mummy's—um—fish slice [slotted spatula].

David: What is it?

Mother: It's a swatter. He's going to hit the wasp with it.

David: How d'you hit wasps with . otters?

Mother [checking]: Swatters? Well, they're made of plastic usually—

David: Yes.

Mother: And they—you bang them down. See if you can squash the wasp.
Looks very angry.

[5 second pause]

David: Is he hurt?

Mother: It looks as if he might be. He's making a funny face.

David: Why he making a funny face? Is that man—
is that man shouting them to go away?

Mother: Think so. He's got his mouth open, so he could be shouting.

[5 second pause as David continues to explore the picture]

Mother: Anyway—

David: Yes.

Mother: [Reads] They called a meeting in the village hall
And Mayor Muddlenut asked them all,
"What can we do" And they said, "Good question,"
But nobody had a good suggestion.
Then Bap the baker leaped to his feet
And cried, "What do wasps like best . to-

David: (completing the line) - eat

Mother: Strawberry-

David: (completing) - jam.

Mother: Now wait a minute.
If we made a giant sandwich -

David: Yes.

Mother: We could trap them in it.

There are a number of significant features about this episode. First, there is the pace. The interaction is very relaxed and several long pauses occur while David looks at the pictures or thinks how to complete what he has started to say. Notice, too, how the mother takes time to explore features in which David shows interest. Particularly striking is David's interest in the man who is attempting to use the fly swatter. He apparently mistakes the object for a notice - a sign - telling the wasps to go away and, as the mother agrees, the swatter in the picture does look like a sign with writing as the representation of the holes arranged in lines is similar to letters or words on a page. Clearly David has already come to understand one of the important functions of written language: to convey information or instructions. Finally, there is the collaborative nature of the event, particularly apparent in David's completion of several lines of the text. Not only is this an enjoyable experience for both mother and child, it also contributes to David's growing understanding of how written language works.

Somewhat comparable opportunities for learning can also occur in relation to the creation of written texts in the course of daily life. Tizard and Hughes (1984) cite the following example in their report of a longitudinal study of four-year-old girls at home and at nursery school.

Pauline and her mother are discussing the items that they still need to buy from the local grocery store. A neighbour has just offered to buy some of the items and Pauline's mother starts to cross off from her shopping list the items Irene was going to buy for them:

Mother: We've only got that little bit of shopping to get now [shows Pauline the list].

Pauline: Mummy? Can I have one of them drinks? Can I?

Mother: Get some more drink?

Pauline: Yeah. Can write it down on there [points to where she wants it written on the list]. Up here.

Mother: I'll get you some when I go tomorrow.

Pauline: Aw! [Disappointed]

Mother: All right? Cause I'm not getting it today. . .
Haven't got Daddy's money yet.

Pauline: I've got no money.

[She seems to have misheard her mother at this point. Her mother corrects her]

Mother: No, I haven't got enough to get my shopping. All of it.

Pauline: Not all of it?

Mother: Irene's just taken five pounds. She'll bring some change back.
If she's got some, she'll bring some change back.
It's not enough to get all that. Is it? [Points to the shopping list]

Pauline: No.

A few minutes later, Pauline asks to look at the list again:

Pauline: Mum, let's have a look! [Mother shows child the list]
Do it again.

Mother: We gotta get rice, tea, braising steak, cheese, pickle, carrots, fish, chicken,
bread, eggs, bacon, beefburgers, beans . . .
Oh, Irene's gone to get them [she crosses off 'beans'] . . . peas, ham, corned beef.

Pauline: And what's that [points to a word on the list]?

Mother: That's lemon drink [crosses off 'lemon drink']
She's just gone down to get that one. See?

Commenting on this episode, Tizard and Hughes point out that, although the mother reported that she was using the occasion to teach Pauline to count, Pauline was also learning about shopping and the function of a shopping list in planning and organizing this activity. They then continue:

What may be less obvious is that Pauline was also acquiring some important knowledge about the nature of written language. It is often suggested that working-class children do not have much experience of their parents engaging in 'literate' activities; yet a shopping list provides an extremely vivid demonstration of the way in which written language may be used within a meaningful human activity. The power of the written word lies in its ability to link up different contexts in space or time, and here it is doing precisely that - forming a link between the home, where the decisions and choices are made, and the shop, where they are carried out. (pp. 75-76)

In the home environment, then, fortunate children experience an extended "apprenticeship" into literacy as they engage with literate family members in joint activities in which written texts play an instrumental role. In these activities, the adults' aim is not to teach their children to read and write *per se* but to assist them to contribute to the activity to the extent of their current capability while managing those parts that are beyond them. This is exactly what Vygotsky (1987) had in mind when he wrote about working with children in their "zone of proximal development", helping them to "go

beyond themselves" and gradually handing over control of the task as a whole when they are able to function autonomously.

Learning to Read and Write Through Talk About Texts

In considering the examples of literate activities above, I drew attention to the collaborative and purposeful nature of the activities in which reading and writing played a part for it is through participation in these activities that children develop the motivation to master the processes of reading and writing for themselves. However, while children fairly readily understand the various functions that written texts play in the activities they mediate, the way in which they do so is not immediately apparent. Certainly, as with other practical activities such as laying the table or doing the laundry, they can learn a great deal about when and why people read and write from observation and from discussion of what is to be done and the reasons for doing so. On the other hand, how the cognitive-linguistic processes of reading and writing are actually performed cannot be understood in the same way, since they not only involve transactions with arbitrary symbols which do not in themselves have meaning but the nature of these transactions is also unobservable. A further level of explanation is therefore required.

The first and most basic idea the child has to grasp is that there is a systematic and constant relationship between the patterns of graphic symbols and the "words" to which they correspond. This is typically achieved through discussions about what particular graphic displays "say". As has been frequently pointed out, children often make this discovery first with respect to familiar signs and logos, such as the golden arches for McDonalds. However, in the case of alphabetic languages, there is a further level of correspondence to be understood - that of phoneme-grapheme relationships. How parents and other family members provide assistance with this learning task varies widely. In some communities, systematic attention is given to learning the letters of the alphabet and their associated sounds; in others, the instruction is much more incidental (Heath, 1983). For many children, the breakthrough is made in learning to write their own name and the names of other significant family members (Ferreiro, 1986). As Clay (1983) points out, in attempting to write words of personal significance, children are forced to grapple with the letter-sound relationship in a more systematic manner than when attempting to read as, when reading any form of meaningful text, there are many other cues in addition to the graphic display that can help them to construct a plausible "reading".

In whatever the decoding/encoding task is approached, one thing is clear: Children need multiple opportunities to talk about text in order to appropriate the connections between spoken and written representations of meaning. Furthermore, the talk is most likely to be beneficial for the child's learning when it is responsive to his or her current interest and provided in such a way as to help him or her complete a task in which he or she is engaged.

With assistance of this kind, many children come to school already well advanced along the road to literacy. Indeed, some are already independent readers and writers. What they need from school is a continuation of the same sort of meaningful engagements in

reading and writing with responsive assistance when they are unable to complete a task on their own. On the other hand, there are many others - the majority in a substantial proportion of kindergarten or first grade classes - who have not enjoyed such an apprenticeship into literacy. Whether from pressure of other responsibilities or because of a lack of awareness of the value of engaging children in joint activities that involve reading and writing, some parents do not provide this sort of relaxed introduction to the written language. For these children it is of even greater importance that their first encounters with written texts are embedded in joint activities that they find interesting and meaningful so that they rapidly develop the motivation to master these processes for themselves. In other words, whatever their degree of mastery of the processes of reading and writing on entry to school, what all children need is an apprenticeship that provides opportunities appropriate to their current level of ability to engage in meaningful literate activities and to receive assistance in mastering the knowledgeable skills necessary to complete them to their own satisfaction.

In the following pages, I will give some examples of ways in which some teachers I know try to provide these opportunities.

Learning the Code and Conventions

As already noted, children enter school with varying degree of understanding about how written language works. On the face of it, this might seem to pose problems in organizing for the development of twenty or so children. However, the variability can be turned into an asset through children helping each other and sharing what they know.

In Karla Poremba's kindergarten class, the children often find a new text on display as they enter the classroom in the morning and they are encouraged to make time to take a careful look at it.. Poremba selects texts, such as a poem, a recipe or a story, that relate to what they are doing in class and uses them for shared reading with the whole class. However, before she reads the text, she engages the children in an activity that she calls "What can you show us?" She invites individual children to come and point to something they know about the text. Here is an example.

One day in early October, the children found the following letter from Uncle Wally (one of the large dolls in the book corner):

Dear Kindergarteners,

It is fall!
Fall is apple time.
We picked an apple
On a tree.
Yum! Yum!

Love
Uncle Wally.

Poremba had drawn an apple over each occurrence of the word 'apple' and a tree over the word 'tree' and these were what the first child drew attention to. Next, Nathan pointed to the 'K' in 'Kindergarteners' and then to the 'KP' written on his name collar so that other teachers could identify him as a child in Karla Poremba's class. He did not know the name of the letter but other children were able to inform him. Once the 'K' in the long word at the beginning of the letter had been located, Erin called out 'Kindergarteners' and Jason then went to the easel and, pointing to the words, read 'Dear Kindergarteners. After Jason, with help from others had read some individual words and then the phrase 'on a tree, Eric offered what he knew, associating individual letters with classmates names: "The Y for Freddy (pointing to the 'Y' in 'Yum' .. and he has an 'F' (pointing to the 'F' in 'fall') .. and an 'I' for Ian (pointing to the 'I' in 'It') .. There's an 'E' for me (pointing to the end of 'tree')." Elise next told what she thought the letter was about: "They got in an apple tree." Finally, Kaitlynn returned to the letter 'K', which she identified in the middle of 'picked' as well as the first letter in her name.

In these exchanges, each child is recognized for what he or she knows; at the same time, there is an opportunity for collaboration as one child builds on what another has contributed. Between them, the children draw attention to many aspects of the written code and the teacher is able to see what sort of individual assistance to give to each child.

Becoming a Writer

However, reading and writing involve much more than knowing the way speech is represented in the graphic code. In fact, although it is possible to write down what one says through a process of transcription, a written text is not normally created in that way. From the beginning, young writers realize that the meanings that are encoded in writing are rather different from the sort of things they say in conversation, where the "text" is created by two or more people interacting together to create a jointly constructed meaning. By contrast, a written text is more like a monologue; and because its coherence must be created by the writer alone, it involves a much greater demand for sustained composition.

As many teachers have discovered, on the way to becoming able to perform this task on their own, children benefit greatly from being able to talk about their text with other writers. One such type of discussion - the "writing conference", as Graves and his colleagues (Graves, 1972) called it - has now become a standard part of writing instruction in many classrooms, particularly when a student has completed his or her draft and the teacher offers comments and suggestions for revising and improving it.

But it is not only on completion of their first drafts that students benefit from talk about their text. As Mary Ann Gianotti, a young teacher with whom I worked, noticed, given the opportunity, her six and seven-year-old students frequently talked to their peers while they were actually composing. Intrigued, she decided to record some of these conversations and discovered that they typically occurred when a child wanted feedback on what he or she had already written or was having difficulty with some aspect of the

task. Gianotti went on to make a systematic study of these impromptu "conferences" during writing workshop and concluded that they served a very important function in the development of the writer as well as of the text under construction.

As [children] are discovering the power and role of written text in their stories, they must come to work among symbolic worlds, and talk is a tool they use to help them with this task. As adult writers, writing a text that articulates one's ideas and thoughts as accurately as possible is also a challenge. We often consult one another, using discussion to check whether our text symbolizes, or captures, our intended meaning for another. (1994, p. 42)

The following conversation is one of those that she recorded. In it, Dan responds to the difficulty his friend Bob is having as tries to read back what he had written the previous day.

Bob: (reading from his text) "The witch lives in a castle. She has a s- s- secret force field. She is-" um .. um .. (stuck on next word)

Dan: Where are you? (asking Bob to show the place in his text)

Bob: Here. (tries to read) "is w- w- witch- rich"

Dan: "rich" (reading what Bob had written)

Bob: (continuing to read) "It .. it"

Dan: No, you have to put a period.

Bob: It is "she"? (he realizes what he has read does not make sense)

Dan: You better erase that. "She does .." (helping Bob to continue his reading)

Bob: Wait. Maybe it's just like this, "it .. she-" I don't get this ..
No, I know. (tries again) "If she dis it" ? What's "dis"?

Dan: Maybe you better erase this line.

Bob: Yeah.

Dan: Then you can think of what you want to do.

[Bob erases the line, then looks at what Dan is doing.]

Bob: Nice picture (commenting on Dan's picture)
I don't know what else to write. Maybe that she is rich?

Dan: Why don't you write about that room that .. um .. she can take her head off and put another head on?

Bob: Okay. (starts to write) "She-" .. How do you spell "she"?

[Dan does not respond]

"She .. she can ... take t- a- k- .. take her-" ..

Dan: -head off and put another head on.

[Bob continues to spell out his text as he writes.]

In this episode, Dan spontaneously comes to Bob's aid when he recognizes that Bob is having difficulty in reading back his text. In what follows, he offers several kinds of advice that help Bob to continue with the composition of the symbolic representation of his story. First, Dan helps Bob to decode his existing text. Then, when Bob realizes that what he had written does not make sense, Dan first suggests adding punctuation to mark a sentence boundary and, when that is obviously not sufficient, he suggests that Bob start a new sentence based on an idea that he had previously thought of when drawing his picture of the witch's castle. In these ways, as well as helping Bob with the challenging task of encoding his meaning, Dan acts as an interested and responsive audience and thereby sustains Bob's motivation to continue to master the knowledgeable skills involved.

The next example involves a different kind of talk about a text under construction which occurred in a classroom of eight-year-old students, many of whom were still mastering English as their second language. In this example, a group of five Portuguese-Canadian children are working together collaboratively to create a text to share with the rest of the class. The task the teacher had set was to base what they wrote on the research they had been doing on dinosaurs, and they embarked on the task with enthusiasm. In the following extract, we see them not only generating an amusing "story", but also helping each other with all aspects of the writing process. The transcript below contains a small number of extracts from a conversation that remained focused on the task for about 40 minutes.

Tanya: Think of the title .. Dinosaur Time.

Tony: Back in the dinosaur time?

[Children sit in silence thinking for a while]

Tanya: Dinosaur school?

Tony and Barb: (simultaneously) Yeah

[Group agrees eagerly; several laugh]

Barb: It will be fun then

Tony: How do you spell dinosaur?

[Several look round the classroom to find the word displayed]

Eric: Wait, You have to vote on that

[All put their hands up]

Barb: Who's going to be the writer?

Tanya: Tony, who else?

Having fairly quickly decided to write about "Dinosaur schools", they begin to negotiate the opening of their text. Immediately, a number of problems arise as Tony, the designated leader, scribes for the group.

Eric: You're doing it all in capital letters? (referring to title)

Tony: Of course!

Barb: Don't write it two spaces .. just write-

Tony: Dinosaurs school (reads what he has written)
Oh, period .. now for the story

Eric: Put- you didn't put a dot right there

Tony: (laughs) I'll put three (he adds three periods after the title)

The exact location of dinosaur schools is discussed over the next several turns and the inside of volcanoes is decided to be a suitable location. Together they generate the first sentence and Tony begins to write.

Tony: Baby- (as he writes)

Many: Baby dinosaurs . dinosaurs (group members chime in)

Tanya: Hm you put dinosaur ..DinoSAURS (emphasizing the plural form)

Tony: I can't do anything now (refers to erasing)

Eric: What did he do wrong? dinosaur school?

Tanya: Dinosaurs, he must put dinoSAURS (again emphasizing the plural)
like thousands of them, more than one

Tony: So, so that's what the school is

Tanya: A school with one kid? (laughs)

Barb: Dinosaur school, school of one kid

Tanya: Baby dinosaurs must go to school inside a volcano (laughs)
Once every five years, a fire alarm will go on as an eruption.

Barb: Ya, that's funny (everyone laughs)

Tony continues to scribe what the group has composed while the others monitor and comment on what he is writing.

Tony: Baby dinosaurs schools are in- are in . volcanoes

Tanya: WERE in

Eric: Were in-

Tanya: They are not right now, are dinosaurs living right now?
WERE (repeating as Tony writes)

[Tony continues to write, vocalizing each word as he attempts to write it.]

Tony: - were in volcanoes, in a volcano

Tanya: In volcano . S (emphasizing plural)

Tony: V O K - V O K (invents spelling) .. V O K - K A

Eric: Tony, I think you've got it wrong ..it's V O L - volcanoes

Tony: (continuing to vocalize as he writes) Every five hundred years - '

Eric: I know ***** (his utterance is unclear but seems to be raising an objection)

Tony: Okay

Tanya: Yeah, five years because they won't be alive in five hundred years

Eric : Yes, they would

Tanya: But they wouldn't be babies anymore

Tony: (agreeing) Yeah

Barb: They'll be five

Eric: So they'll be in grade six **

Tanya: They are in grade six .. they'll be in school, they'll be teenagers, not babies anymore

Tony: I made a mistake

Barb: Who cares?

Tanya: They'll .. they'll be in high school

These extracts, which involved only the first few lines of their final text, show very clearly the complexity of the challenge facing novice writers. First there is the search for what to write. Here the decision was somewhat assisted by the teacher's specification of the general topic and by the knowledge that the rest of the class was the intended audience. But even when the general idea has been decided on, as it was fairly early in this writing episode, writers have to generate specific detail and ensure that there is coherence in the emerging structure of meaning. Then there is the problem of "wording" - the choice both of appropriate words and of their correct morphological structure for their role in the context of the sentence. Finally there are the conventions of spelling and punctuation to grapple with as the spoken version of the text is encoded in graphological form. Not surprisingly, managing all these levels simultaneously can seem an overwhelming task, particularly when the physical formation of the letters is still also very time-consuming.

For this group of writers, all of whom were still mastering English as their second language, there were obvious benefits in undertaking this task collaboratively. Not only were they able to draw on the diverse range of relevant expertise that was distributed among the group, but together they were able to overcome the problems of short-term memory involved in retaining the intended meaning that had been composed while dealing with the difficulties of accurately representing it on the page. And, most important, their shared commitment to the task sustained their motivation to continue.

Here is the text that they had produced at the end of the forty minute activity. Probably because of its witty inventiveness, the class judged it to be the best produced by any group.

DINOSAURS SCHOOL...

Baby DINOSAURS Schools were in VOCKANOS.

Every 5 Years The Fire Drial would Go On as an ERUPTION

THEY WriHT About People. THE Paper was 10 mters long. And

The Pencil is 5 mters long. There Close is poka Doted. And THERE

Poget is about THE Fugter. THE Librery is called Home read stone.

And The books or made of saled. Rock. THEY live in haya rock.

THERE Brians or as small as marbells. THERE LUnCH is Brontobrgers.

THERE TOYS ARE all With batreries, THERE HOUES is MADE OF Pebulls.

by Tony, Tanya, Barbara, Margaret and Eric.

This practice of writing collaboratively is also helpful for older students, particularly for second language learners or students with learning difficulties who lack confidence in their ability to compose extended texts on their own. Not only does the social nature of the enterprise increase their interest in and enjoyment of the task, but where they might be reluctant to review and revise their text when writing individually, they are more willing to do so when their contributions are challenged by peers whose opinion they value. Of course, the ultimate aim is that they should take responsibility for the texts that they produce in solo mode, but for many students the support of collaborative peers is an excellent way of assisting them to reach this stage.

Another variant of collaborative writing involves the whole class commenting on a text that the teacher displays using the overhead projector. Whether the text is a student's draft or one that the teacher has written, the purpose is to elicit critical comments and alternative suggestions which can become the basis for discussion of how to improve the text. The following is an example of this strategy being used with a class of ten and eleven-year-old students with learning disabilities (Englert, 1992). The teacher has written about what's involved in planting bulbs - a topic about which she thinks her students are knowledgeable. Placing it on the overhead projector, she asks the students to help her revise it, using the "think-sheet" for editing that she has devised for them.

T: Okay, as I read my paper . . . listen for several things. Listen for key words. [Check for] Clear steps. Ask "Does it make sense?"

T: [Reads her own story]

Jim: It has five key words: "First, next, then, then, next". [Two students reread her paper aloud and another goes up spontaneously and circles her key words on the overhead]

T: [As students begin to circle her key words, she responds] Go ahead and circle my key words. That's just a draft; I'll be revising it anyway. [The students count five key words]

T: Was it clear?

Ss: Yes.

T: What was clear about it?

Meg: You said how to put it in the pot and then how to do it . . .
[You said] Put soil in the pot.

T: Was anything unclear?

Roy: If you added more, it would be awful. I think it was perfect.

T: Even my writing isn't perfect all the time. I never said what kind of soil to put in there. And when I said pour half the soil in the pot, I wonder if they knew to buy a bag.

Roy: You need to say, "First-" .. you need to tell them to go to the store-
And buy pot, soil, and bulbs. They are going to say where do I get this stuff?

T: You are right. I have these things at home, but some people don't. I think I'll write in the margins. "First, you need to gather these materials from a store."

Jim: From which store?

Meg: Like Meijer's.

Roy: Like Frank's.

T: Oh, maybe I'll say, "Like Meijer or Frank's." That will give them a choice.

Meg: Frank's might be more expensive.

T: Oh, I could add, "Frank's might be more expensive." Do you think that's a good warning?

Roy: Frank's might have more bulbs.

Meg: So does Meijer.

B: Frank's has equipment right there.

Meg: Meijer has a place for equipment on another aisle.

T: You have good arguments for each. What if I said, Frank's might be more expensive, but it has more variety. It's up to you?

S: That would be okay.

T Did I tell what I was explaining?

S: Yes.

T: Where did I say that?

Tess: In the beginning.

Students spontaneously take her story off the overhead and put it on the table as they reread it to find the part. When they do, teacher reads that part aloud and asks student to underline that part of the story that answers the question for her.

T: Meg has an idea that she has been saving.

Meg: First, you take the pot and then pour the soil. Put the bulb carefully in the soil. Cover it gently.

T: I like your words "carefully" and "gently" because you can turn the bulbs over. And I never said, "First stake the pot and put soil in it." I'm going to take a caret and make a mark. [Discusses what a caret is and its purpose, i.e., to indicate what to add and location of insertion]
Thank you. That makes a lot more sense.

Commenting on the importance of making writing strategies visible to students, Englert writes:

The ability to model strategies and hand over control of the strategy to students in a discourse that is socially constituted by the entire literacy community is an important and complex instructional goal (p.159)

And in relation to this particular episode, she writes:

[We hear] the voices of the students emerging in collaborative interactions with peers in a dialogue that resembles a conversation. The meaning of ideas is truly negotiated by members of the group. ... The teacher also prods students to use their writing voices as she asks them to justify and support their opinions... Thus,

the teacher treats them as important members and informants in the literacy community of which she is a part. In this way, the students are stretched to use their newly learned language and strategies to communicate and inform others, including the teacher. (p. 160)

In this episode, as Englert remarks, one can see clearly how the teacher listens to and incorporates the students' comments and suggestions. In this collaborative oral mode, they are, with the teacher's assistance, carrying out the task of revising the teacher's text to make it easy for a reader to understand and act upon. With many occasions of this sort of collaborative experience they will be able to revise their own texts in the same way. In other words, they will eventually appropriate the teacher's model and make it their own.

Talk in the Context of Reading

So far in discussing the important role of talk in the development of literacy I have focused on writing. But talk about text is just as important in relation to reading and in this section I shall discuss a variety of ways in which it can be fostered.

One of the implications of accepting a constructivist theory of learning is the recognition that each individual interprets new information in the light of their existing knowledge, interests and current purpose. This applies to information obtained from reading just as much as to information gained more directly through participation in material activity. As Rosenblatt (1938) pointed out many years ago, a written text does not transmit the writer's meaning to the reader as if it were a pipe transporting water. Reading involves a transaction between the reader and the text which results in the construction of a particular interpretation specific to the reader and the occasion and likely to be different to some degree from the interpretations constructed by other readers of the same text. Rosenblatt goes on to distinguish two stances to a text: the "efferent" and the "aesthetic." When responding from the efferent stance, readers are motivated by specific needs to acquire information; their concern is to understand what the text (or its author) is saying. On the other hand, when readers are responding in the aesthetic stance, it is their own response to the experience of the text that is primary.

Two important implications follow from this understanding of the reading process. First, there is no one correct, authorized interpretation of any text; many alternative interpretations are possible and therefore it is valuable for readers to compare their interpretations with those of others in order to see the text from many perspectives. Second, not all interpretations are equally justifiable; although readers bring their personal experience to their transaction with the text, they need to provide warrant for their interpretation by reference to the actual wording of the text. However, while the first of these implications is most important in relation to transactions with imaginative literature and the second in relation to presentations of generally accepted facts and theories, both are always relevant. Which is given precedence depends on the purpose for reading - on which of the two stances, aesthetic or efferent, is most appropriate for the task in hand.

Whatever the purpose for reading, however, there is great benefit in readers talking about the text in order to clarify their own interpretations and to compare them with those of others. On the one hand, they have the opportunity to hear and respond to the contributions of others and, on the other, in formulating their own response to the text in order to contribute to the discussion, they frequently arrive at a deeper understanding than they would have achieved if they had merely read the text on their own. As many readers have recognized, how does one know what one thinks until one has tried to explain one's ideas to others?

In the first section of this chapter, we saw David and his mother engaged in such a discussion as they were reading *The Giant Jam Sandwich*. The question to be considered now is how can such discussion be incorporated and deepened in relation to reading in the classroom? The following are examples of different strategies that I have seen used with success.

Seeds and Webs

The first example comes from Mary Ann Van Tassell's first and second grade classroom in Toronto. We first met Mary Ann earlier when, under her former name of Gianotti, she investigated children's impromptu writing conferences. Some years later she decided to try a new strategy for getting her six and seven-year-olds to talk about their responses to the stories they were reading. Since these children were still beginning readers, she encouraged them to take home books from the classroom library that they thought they would enjoy so that their parents could read them with them. In order to have a record of their responses, she asked the parents to write the children's reflective comments on Post-it notes and to stick each note on the appropriate page of the book. Then, when several children had read the same book, she planned to discuss the book with them and create a web in which their notes were spatially related in terms of ideas that were connected in some way.

The following extract occurred after three children had read *A Friend for Mrs Katz*, a story about an old woman who lives alone and is befriended by Larnell, a boy who gives her a kitten for company. Each of the children had contributed a number of 'seeds' on Post-it notes and, in this extract, two of them are deciding with their teacher how to arrange them on a large sheet of paper to show the connections among them. (The third child is absent because he is sick.) So far, notes referring to cats have been arranged in one group and they have been considering a note that refers to the Jewish custom of putting stones on the graves of loved ones who have died. Karla has found two seeds that she thinks should go together.

Karla: (pointing to a 'seed' and reading) It's because it says
"It is good that Larnell and Mrs. Katz became friends."

Teacher: -"that Larnell and Mrs. Katz became friends"

Karla: And this says "That was nice what people do to see and say

'Hi' to people that died"

Teacher: -"that was nice what people do to see and say 'Hi' to the people that died"

Ashlynn: -"what people do to see and say 'Hi' to the people that died"

Teacher: Yes . so what is it that's connected? -that connects them?
What is it that connects them? (the two seeds just mentioned)

Karla: <That they're both like - they both say what * * >

Teacher: How is this- you mean because this (pointing to the first seed)
shows that they were friends?

Karla: (nods)

Teacher: And THIS is saying that they're friends? (pointing to the other)

Karla: (nods)

Ashlynn: Why don't we put this one before that one <altogether then>?

Teacher: Well are these all connected though? (referring to the seeds that Ashlynn
indicates, which refer to Passover, friendship, and the graveyard)

Ashlynn: No

Teacher: They're not - this one (the seed of friendship) is connected to all of those
Could we put it kind of in the middle and put these around it?

Ashlynn: Yes

Karla: Yeah

It must be unusual for six-year-olds to be engaged, as they are here, in considering the relationship between the different themes of a story and providing justifications for their opinions. But what is particularly interesting about the procedure that the teacher has invented is that, by having the children's comments on different aspects of the story written on small Post-it notes, their ideas do indeed become objects that can be compared, and physically placed in different relationships to each other. As the teacher suggests:

Throughout the conversation, both girls struggle to explain their reasons for connecting seeds. This is the meta-cognitive talk. They are not used to making these thoughts explicit, and it is exactly this type of talk that moves the conversation beyond discussion of the literal into the more abstract themes of the

story. At this point, both students needed help in making these connections explicit. (Van Tassell & Galbraith, 1998)

As she also tells the children at another point, there is nothing final about the first way in which they decide to arrange them, as they can always move them later, if necessary, when they see a better way of relating them. As they arrange the seeds in the web, therefore, the children are learning a very important feature of composing in writing: that ideas can be revised, as can the way in which they are put together in the text as a whole. And, although they are probably not fully aware of it, they are also learning that when ideas are arranged in different combinations, new meanings emerge from these alternative juxtapositions. As Karla added when they had completed the task, "We never knew things could fit together like that."

Following the use of the web in Mary Ann's class, her colleague, Barbara Galbraith, extended the idea of a web to investigate story elements, such as plot, key events, and characterization, in the novels that her grade three students were reading. Here, too, the web served as a form of synoptic text, enabling the students to make connections at a meta level that they were less able to see as they simply read through the story, page by page. And, once again, it was through talking together about the "seeds" they had identified that they were able to build larger patterns of meaning.

Becoming a Community of Readers

In her grade four class of nine and ten-year-olds, Zoe Donoahue makes a practice of reading to her children every day. She believes that reading is essentially social in nature: Not only do readers transact with the writer's text; they also interact with each other about their interpretations and responses. One of her aims in reading aloud, therefore, is to create and foster a community of readers in her classroom.

Typically she serializes a novel, one chapter a day, and follows each chapter by a time for discussion of the story so far, how it might continue, and what aspects of the story individual children find particularly significant or memorable. One year, when she was reading *Mrs Frisby and the Rats of Nimh*, she decided to videorecord these discussions in order to investigate just how children were taking up the opportunity to share their responses. To her dismay, she discovered from viewing the first two recordings that there was little true discussion. As teacher, she nominated each speaker and provided some kind of response to his or her contribution and then proceeded to nominate the next speaker. Thus, since the students addressed their remarks to her, she was acting as the pivot of the talk and, as a result, the ideas that individual students introduced were not being taken up by their peers and corroborated and extended or countered from an alternative perspective.

In order to make the talk more truly a discussion, Donoahue decided to change the "ground rules" for their book talk. In future, she would nominate the first speaker and then any other students who had something they wanted to contribute to the topic could do so without being nominated, provided that they took turns and made explicit how their

contributions related to those that had preceded. From the beginning, once they had understood the new format, the children had no difficulty in sustaining their discussion without the need for the teacher's control. And Donoahue, for her part, found herself much better able to appreciate the various points of view that were expressed and to focus her contributions on facilitating their collaborative meaning making.

Here is an extract from the discussion of a later chapter in *Mrs Frisby*, in which the children are speculating about how the rats - who had learned to read - would make their escape from their cages in the laboratory. (Justin is one of the rats)

Wil: I think that Justin was * their guard that they have <now>.
And that Justin- I think that gets out and * * * * and
he gets out- well, and Jennifer doesn't.

Dyl: You know that picture that they had <of> a little air vent?
Well, I think that the guy- the rat that got out, was through there.

Ann: Well, I think that the steroids are going to other rats * * * ...

Cal: They're trying to make you LOOK stronger

T: Well, yes, they do help with strength, BUT, what was the thing
they said the steroids would do for the rats?

Ss: Hold them down.

T: Hold them down .. but there was something else, too.

Ric: Increase their lifespan.

T: Yes, increase their lifespan. Good listening, Ricky.
Yeah, so, that's interesting. They're saying some different things
than we might have thought about the steroids.

Wil: I don't think it's steroids that increase their lifespan <so much.> *
If a person takes steroids- <it doesn't increase their life>.

Dyl: It'll SHRINK their lifespan ... it does the exact opposite

Cal: And I think that Justin finds a way OUT and then all the others
follow- like all the others get out and go out the same way

T: <All the other * *>?

Cal: Yeah, in the 'A' group .. then some of them don't WANT to go out because they had- like a different- you know how it said <they were going to get the guns and needles> . I think 'B' and Control Group don't want to get out.

T: Yes ... I wanted to ask you last time, but we got busy with other things- Do you UNDERSTAND what the concept of the CONTROL group is in science? Does anybody know?

Dyl: They're the people who don't get anything- anything done

T: And why would you want to have a group who had nothing done to them?

Cal: <so you can see> the differences

T: Ok .. Does anyone want to explain another way?
That's good Callie, but sometimes it helps to hear it another way.

T: Andre, can you explain that .. in your own words?

And: (coughing) * the * of the control group, just like stays, just at their same I.Q. And the other- two other groups- two in this case- get like - they test each other and they time them and all that, and they see the differences and then they can find out how much SMARTER they are and how much faster they learn

Pat: I think also that <our> group escapes but <they're> smarter and the people who don't escape are the rats of Nimh .. how they're captured by Nimh

And: And the rats of Nimh- and the rats of Nimh came back just a few chapters ago- with the wire and the radio-

Pat: No, no that was THEN, that was then

Andre: That was- no it wasn't

Pat: Yes it was

Jes: I think it was the rats that didn't get a chance- that DIDN'T get back, the * * ones, and they brought wires for- that they came back a little while ago, right? And then they came back AGAIN with wires so that the smart rat could build the radio

Mat: Except they're not rats

Ss: Oh (expressing disbelief)

T: What do people think about what Jessie is saying?
Anything to add-

From the chapters already read, which begin the narrative part way through the sequence of events that make up the story, the children know that some of the rats escaped but they don't as yet know which rats or how. Presumably it was the smarter ones, including Justin; but what had the steroid treatment to do with the escape, if anything? Depending on the effects expected from the administration of steroids, this treatment could possibly be a key to the explanation of how one of the three groups managed to escape. At this point, however, there seem to be as many opinions as speakers. It is in this context that the teacher makes her first intervention, not to test the children but, by clarifying the likely effect, to help them to make a better informed prediction as to how the story would unfold. Arguably, this is also the purpose of her request for an explanation of the function of a control group.

As is so often the case, in choosing to engage students in a particular activity, the teacher has more than one goal in view. Without doubt, her first goal for these book talks was to provide an opportunity for the children to further explore both the story and their reactions to it. However she also had goals relating to the nature of productive discussion and the ground rules that would be likely to promote it. Her third intervention, asking what people thought about Jessie's suggestion, was clearly related to this latter goal, reminding them not to be so eager to offer their own opinions that they gave inadequate thought to the opinions of others. This is borne out by her closing comment at the end of the discussion:

T: That was a GREAT discussion . lots of REALLY good comments.
That's why we kept at it for so long because you were so focused
on the discussion you were REALLY listening to one another

As she comments in the article from which the above extract is taken, these discussions not only deepened the children's appreciation of literature; they also depended on and contributed to the general classroom ethos of caring and collaboration.

I have always found the shared experience of teacher read-aloud of novels a strong influence on the building of classroom community, and this was even more the case once control of the discussions was given over to the children . The expectation in our community was that children would initiate and sustain our discussions about the novels. Through joint participation in discussions, the children became skilled at this. As a mentor, I participated in the discussions by making comments and asking questions that allowed children to work and to learn within their zones of proximal development (Vygotsky, 1987). My comments and questions provided scaffolding for the children, the apprentices, so that they could become full members of the community. Their growing ability to make relevant comments and build on each other's ideas, without the teacher being the sole authority, had a profound influence on the children's sense of themselves as a

cohesive group who enjoyed listening to stories and talking with and listening to one another. (Donoahue, 1997)

Apprenticeship into Literacy

In earlier times, many young people learned the trade or craft by which they earned their living through an apprenticeship. Living and working in the workplace of a master craftsman, they learned the knowledgeable skills of the craft by helping the master and then, with his help, gradually taking over responsibility for more and more of the tasks until they had fully "mastered" the craft themselves. In this context, the knowledge and skills specific to the craft were not learned in isolation but as resources required in the course of creating the crafted artifacts.

In today's more complex world, this way of passing on knowledge and skills from one generation to the next is no longer the norm. Instead, we have preparatory institutions which specialize in teaching and learning quite separate from the context of use. They are called schools and universities. In these institutions, the knowledge and skills that are taught have no immediate purpose in the lives of the learners and so they are presented and perceived as ends in themselves; what is valued is being able to show that the knowledge has been "acquired", not that it has been understood and can be put to use in "real life" situations. Unfortunately, many students do not learn well in this "encapsulated" setting, and even those who do succeed in acquiring what is taught frequently cannot later put their school knowledge to use in the world beyond school because it has never become part of their personal understanding of that larger world and of the activities by means of which it is sustained.

From a social constructivist perspective, however, the concept of apprenticeship still functions as a powerful metaphor of what Vygotsky (1987) described as learning through "assisted performance in the zone of proximal development" (Tharp & Gallimore, 1988). And, like Donoahue in the quotation above, many educators recognize that, even in school, the most effective learning occurs in a "community of practice" (Lave & Wenger, 1991) in which, through participating in joint, purposeful activities, members master the knowledgeable skills necessary to achieve the valued goals of the classroom community.

Literacy is such a resource of knowledgeable skills and, as we have seen in the preceding examples, the ability to read and write can be progressively mastered through using written texts as tools in the achievement of goals that are meaningful and of importance to the community. Expressing the same idea, Frank Smith (1972) described becoming literate as joining the literacy club and learning how to take part in club activities from more experienced members. Parents and other family members form the first literacy club and many children make considerable progress in their apprenticeship in literate activities before they go to school. Whatever their preschool experience, however, all children need their schooling to provide an extended apprenticeship into the larger community and its varied activities, in which literacy almost always functions as a valuable and necessary resource.

In adopting the metaphor of apprenticeship, however, we must not ignore the difference between mastering the use of material tool, which can largely be learned through observation and guidance, and mastering the use of symbolic tools, whose skilled use is largely unobservable and can only be inferred from the finished product. It is for this reason that an apprenticeship into literacy must involve overt and explicit talk about texts and about the mental processes by which they are created and interpreted. A central activity in the literacy club is therefore conversation which weaves the connections among readers, writers and texts, the experiences that give them meaning, and the purposes they serve in the lives of the members.

Conclusion

In this chapter, my aim has been to show the complementary inter-relationship between action, talk and text. In contemporary life, each of these modes of meaning making is completed and enhanced by the other two. Reading and writing text may be the last of these three to be learned, but written texts only take on their full meaning in relation to the activities in which they play a part and to the talk that surrounds their composition and interpretation. At the same time, written texts add an important new dimension to meaning-making by enabling meaning to be given material permanence in the printed or written word so that it can be engaged with by people in other times and places. Engaging with written texts also allows writers and readers to rethink and revise both their texts and their ideas.

In helping children to become literate, therefore, and in encouraging them to exploit the power of literacy to achieve purposes of personal and social significance, four basic principles need to be borne in mind:

- * Reading and writing are not ends in themselves; rather, they are means of constructing and communicating meaning for purposes and in situations that benefit from the features of written text that depend upon its permanence as a material artifact.
- * Texts do not carry meaning in themselves; rather they require readers and writers to transact with the written text in order to match their intentions as writers or interpretations as readers with the cues to meaning that are encoded in the graphic display. At the same time, since readers and writers bring different experiences and purposes to this transaction, it is important to remember that the match that is made will differ from one individual to another.
- * Since meaning making is an inherently social activity carried out within a community that shares assumptions about values, ends and means, both learning to read and write and using texts to act, to communicate and to learn depend on collaboration with other members of the community. Such collaboration occurs most naturally and easily through talk about the text.
- * Making meaning through reading and writing involves skills and knowledge that are specific to these activities. Furthermore, there is often a need to deliberately teach

these knowledgeable skills. However, the teaching should, whenever possible, be related to the learner's current purpose and to his or her current abilities.

These principles may seem rather abstract to parents or teachers anxious to help their children to read and write effectively and with personal satisfaction. The ways to put them into practice, on the other hand, are almost self-evident. The first and most important concern must be, as Vygotsky advised, to ensure that reading and writing are undertaken for some purpose that is of significance to the learner. Enjoying a story or poem, finding out about a topic of interest, communicating important ideas and feelings to others, providing information that others will find interesting or helpful - all of these are worthwhile and satisfying reasons for reading and writing.

Furthermore, such occasions for reading and writing arise much more naturally, particularly in the classroom, when adult and children see themselves as members of a community rather than as isolated, competing individuals. Where activities are undertaken jointly and collaboratively in order to achieve some valued outcome, there are many situations in which it is natural to read or write in order to contribute to the end in view (Wells, 2002). And, since the text that is read or written is of importance to other members of the community as well, it is equally natural to talk about it - to discuss its significance to individual members or its effectiveness in communicating the intentions of its writer(s). Thus perhaps the most important requirement for a literate community to flourish is that there should be frequent and rewarding opportunities for its members to have conversations with each other about what they are doing, and why, and about how the texts they are engaging with are helping them to understand themselves and their purposes better.

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