

# Creating the Conditions to Encourage Literate Thinking

Recent research has transformed our definition of literacy and now offers insights into how to create classroom communities of literate thinkers.

During International Literacy Year,<sup>1</sup> when a worldwide effort is under way to raise literacy standards, it is more important than ever that we strive to be clear about our goals. What does it mean to be literate? How is literacy acquired? What are the educational conditions that most effectively promote this acquisition? In this paper I shall try to summarize some of the most important insights from recent research in the field of literacy by offering answers to these fundamental questions

## What Does It Mean to Be Literate?

During the last 20 years, traditional notions of literacy as the application by an individual of a set of skills for encoding or decoding any written text have undergone a fourfold transformation

## Different Texts for Different Purposes

First, and most important, we have come to recognize the wide variety of purposes that texts serve in our lives. Different purposes give rise to texts of different types, and these, in turn, require different modes of engagement with them (Kress 1985). Furthermore,

the purposes for which people use texts vary from one culture to another, as do the values that we place on them. As a result, there are *cultural differences* in the competences considered central to literacy

**Although actual acts of reading and writing are necessarily individual, the context in which such acts occur is always inherently social, as are the purposes that texts are designed to serve.**

In our own Western culture, the most frequently encountered types of text are those that are fairly directly linked to action, for example, the advertising copy that influences our choice of goods to purchase, the forms we fill in for a variety of bureaucratic purposes, or the notes we leave on the refrigerator reminding a family member to buy more milk. A second major category includes texts whose primary purpose is the transmission of what is taken to be factual information: reference books, work-related memos, instruction manuals, and so on. A third category includes texts that offer the author's considered interpretation of some aspect of experience, either real or imaginary: expositions of scientific theory, history, and biography, as well as novels, poems, and plays.

Clearly, these different types of text call for different modes of engagement on the part of readers and writers. And each demands the use of different procedures for relating the symbolic representation of meaning in the text to the user's knowledge of the world and his or her purposes for engaging with the text. The first type calls for strategies oriented toward effective action, the second toward information, and the third toward critical, imagina-

tive reflection (Wells 1987) In addition, all depend on certain basic abilities in handling the symbol system and the cultural conventions for using it However, these latter abilities—like the three modes themselves—are instrumental to the achievement of purposes beyond the texts and should not be thought of as ends in themselves

Political campaigns to raise literacy standards have tended to emphasize the first and second modes of engaging with texts—the functional and the informational However, while these modes are certainly important, it is the third, *the mode of "literate thinking,"* which is the most vital for full participation in a literate society For unless individuals develop strategies, as readers, for constructing and critically evaluating their own interpretations of texts and, as writers, for using the texts they create to develop and clarify their understanding of the topics about which they write, they remain dependent on others to do their thinking for them The result is that their own lives are impoverished, and they are unable to contribute as fully as they might to the affairs of the workplace and to those of the wider society

### ***Text-Supported Thinking and Doing***

It is this recognition of the intimate relationship between literacy and thinking that constitutes the second major development For in the use of texts as external representations of the meanings achieved through critical and constructive thought and reflection, literacy provides a powerful tool for the extending of understanding about the material world of objects and events and about the inner world of values, feelings, and intentions It also provides a means for gaining a greater understanding and control of the mental processes themselves It is for this reason that Bruner (in press) has characterized literacy as "a technology for the empowerment of mind" Hence, too, the concern in recent discussions of literacy learning that the emphasis in classroom activities should be on the purposeful use of texts to develop "literate thinking" (Langer 1987, Wells 1987)

**To be fully literate is to have the disposition to engage appropriately with texts of different types in order to empower action, feeling, and thinking in the context of purposeful social activity.**

### ***The Connection Between Writing and Other Symbol Systems***

The third way in which our understanding of literacy has been transformed is the recognition of the essential similarity between writing and other modes of symbolic representation, employing media such as computer software and television as well as ink and paper It is this concept that makes sense of such recent extensions of the underlying concept of literacy to areas other than reading, as in "computer literacy" or "mathematical literacy" Mathematical formulas, scientific and logical equations, diagrams, flowcharts, and models—all share with written text the essential features of use of conventional systems of symbolization and permanence of representation

In all these cases, the use of symbol systems to represent objects and states of affairs and the relationships between them enables experiments to be carried out in the hypothetical mode as possibilities are explored through the manipulation of the symbols It also enables people who are separated in time and space to collaborate in this mental activity Equally crucial is the permanence of

all these types of symbolic representation, because the continued existence of the text as a record of the thinking process allows one to reflect on the ideas represented and to rework and revise them, with each successive draft being the launching platform for further exploration and refinement

### ***The Collaborative Nature of Literacy***

The final way in which our understanding of literacy has been transformed is through a growing awareness of its social, collaborative nature Although actual acts of reading and writing are necessarily individual, the context in which such acts occur is always inherently social, as are the purposes that texts are designed to serve (Heap, in press) In the first place, texts are almost always written or otherwise produced in order to be read and interpreted by a reader Furthermore, as with spoken messages, written texts are produced to further some interpersonal purpose the enabling of another's action, the transmission of information, or the sharing of understanding and emotion But, equally important, the creation and interpretation of texts never occurs in a social vacuum Every text exists in the context of all the other texts in the writer's or reader's cultural tradition that he or she draws upon, albeit usually unconsciously, in engaging with the present text Where the text is of importance to the individual, too, he or she will probably discuss it with other people in order, as a reader, to calibrate his or her interpretation of it with interpretations of others Likewise, as a writer, the individual will do so to obtain feedback on whether the piece of writing succeeds in achieving its intention

With these insights in mind, we are now in a position to attempt to define literacy, at least as it is optimally practiced within Western literate society at this point in its cultural evolution To be fully literate, I therefore suggest, is to have the disposition to engage appropriately with texts of different types in order to empower action, feeling, and thinking in the context of purposeful social activity

### **The Acquisition of Literacy**

Just as our understanding of the nature of literacy has been transformed by recent research, so has our understanding of how it is acquired. Most significant in this respect has been the spate of studies that, building on naturalistic studies of oral language development, have explored the emergence of literate behaviors and understanding in the preschool years before children have received any systematic literacy instruction. What follows is a brief summary of the findings from this research (for a comprehensive survey, see Hall 1987).

- Where children grow up in a literate culture, the representations they form of how written language works and of the purposes it serves are progressively constructed and modified as they actively make sense of the literacy events they experience. In broad outline, the processes in which they engage are very similar to those involved in learning to talk (Ferreiro 1986, Heath 1986).

**Simply telling students to read more critically or to make their point more effectively in writing will be of no help unless they have developed an understanding of the mental activities involved.**

- There is no particular age (such as age of school entry) nor a prerequisite state of "readiness" that must be reached before this learning can commence (Goodman 1984). Nor does the developmental process require the intervention of deliberate and systematic instruction. However, it does require opportunities for participation in joint literacy events with other, more mature members of the literate culture (Clark 1984).

- With respect to their understanding of the written code, children's development follows a broadly common sequence of development. In the process, some of the hypotheses and strategies they form are, by adult standards, erroneous, however, with the benefit of further appropriate experiences, these hypotheses and strategies are ultimately superseded by more conventional and effective ones (Ferreiro and Teberosky 1982).

- With respect to children's understanding of the uses of literacy, their development is more variable and is dependent on the range and frequency of their encounters with texts of different types and on the extent to which they are able to discover how these different texts are used within the events in which they occur (Heath 1983).

- Literate thinking is not dependent on the prior achievement of control of the written code. Texts in other media, such as pictures and commercial logos, can provide opportunities for critical and reflective thinking about the meanings represented (Harste et al 1984), close attention to the "text" of spoken utterances can also perform a similar function (Heath 1986, Chang and Wells 1988).

The picture of literacy development that emerges from these studies is thus very much in accord with current theories of early learning more generally, which emphasize both the active and constructive nature of the child's intellectual development and its social basis. That is, children learn most effectively through participation in meaningful joint activities in which their performance is assisted and guided by a more competent member of the culture (Rogoff 1989, Tharp and Gallimore

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1989). Such an "apprenticeship" model of learning is, of course, an extension of Vygotsky's theory of the relationship between learning and teaching. His theory emphasizes both the social origins of higher mental functions in the practices of the culture and the role of parents and teachers in providing opportunities for the learner to share in these practices and, through so doing, gradually to appropriate those mental functions through demonstration, guided participation, and task-related talk (Vygotsky 1978, Cole 1985).

The processes through which the mental functions associated with literacy are acquired—and in particular those required to be able to engage with texts in the mode referred to above as literate thinking—can be seen as a paradigm example of what Vygotsky (1978) called "learning in the zone of proximal development." For, although there are external behavioral aspects of reading and writing in relation to the physical text, which can perhaps be taught through traditional modes of instruction, the essential activities in which the reader or writer engages are predominantly mental in nature and hence not available to inspection. Unlike many other skillful performances, therefore, literate behavior cannot be learned simply by observation and practice, nor through the sort of "recitation script" (teacher-dominated lessons) observed by Dur-

kin (1979) and Heap (1985) Simply telling students to read more critically or to make their point more effectively in writing will be of no help unless they have developed an understanding of the mental activities involved And for this to happen, they need to participate jointly in reading and writing events with their teachers or more competent peers, in which these internal activities are externalized—and thus made available for appropriation—in talk about the text

In the preschool years, such talk happens quite spontaneously in many families as child and parent engage in shared story reading (Teale 1984, Wells 1986) It can also occur around action-oriented texts, such as in the preparation of a shopping list (Tizard and Hughes 1984) or around information-oriented texts such as "I-Spy" books used to while away the time on a long car journey In all these cases, the relationship of the text to the participants' purpose is apparent in the context of the activity If this purpose is then jointly enacted through the oral rendering of the text, together with accompanying talk in which comments and explanations are offered that relate the words and phrases in the text to the participants' extra-textual experience, the child "sees" what is involved in engaging with a text in this way Gradually, the child also begins to perform both the external and the internal activities for himself or herself

### **School Conditions That Support Literacy Learning**

If we wish to achieve the goal of full literacy for all students in our society, therefore, whatever their cultural or socioeconomic background, the emphasis in school has to be placed on the use of texts to empower action, thinking, and feeling in the context of purposeful social activity What this requires is the creation of classroom communities of literate thinkers, in which students collaborate with each other in activities, chosen with teacher guidance, that involve the use of texts of all kinds—both as a resource for achieving understanding and as a means for communicating what has

## **Children learn most effectively through participation in meaningful joint activities in which their performance is assisted and guided by a more competent member of the culture.**

been understood to others, both inside and outside the classroom Where the essentially social nature of literacy is emphasized, along with its power to facilitate thinking, talk about the texts that students are engaging with will occur quite spontaneously And it is by participating in such talk, sometimes as an equal member of the group and sometimes as tutor, that the teacher can model and explain how to engage with texts in ways appropriate to the purpose at hand (Wells et al, in press)

How to create such classroom communities of literate thinkers is thus the challenge that faces us in the International Literacy Year and beyond The answer will not be found in state-mandated programs, however well-founded they are in current thinking Rather, the solution rests with the encouragement of teachers to act as literate thinkers themselves using the evidence from observations in their own classrooms as texts to empower their own planned curriculum change and development (Goswami and Stillman 1987, Pinnell and Matlin 1989)<sup>2</sup> It is, I believe, in the grass-roots movement among teachers who have discovered ways of putting this conception of literacy learning and teaching into practice in their classrooms that the best hope of raising standards of literacy is to be found.□

<sup>1</sup>Unesco has designated 1990 International Literacy Year, the first phase of a 10-year effort to eliminate illiteracy throughout the world. The organization will sponsor two conferences this year the "World Conference on Education for All—Meeting Basic Educational Needs" in March in Bangkok, and the Forty-Second Session of the International Educational Conference (IEC) in September in Geneva. For more information, write Unesco, place de Fontenoy 75700 Paris, telephone international +33-1-45 68 10 00

<sup>2</sup>Limitations of space preclude the citing of particular examples here However, journals such as *Language Arts* and publications of the National Council of Teachers of English and the International Reading Association increasingly contain articles by teachers who, through inquiries carried out in their own classrooms, are working to create classroom communities of literate thinkers For other examples, see the articles in this issue by Julie Jensen and Nancy Roser, Linda Rief, and Dorothy Strickland, as well as Anne Meek's conversation with Eliot Wigginton

### *References*

- Bruner, J.S. (In press) "The Invention of Self: Autobiography and Its Forms" In *Literacy and Orality*, edited by D.R. Olson and N. Torrance Cambridge: Cambridge University Press
- Chang, G.L., and G. Wells (1988) "The Literate Potential of Collaborative Talk" In *Oracy Matters*, edited by M. Keynes Philadelphia: Open University Press
- Clark, M.M. (1984) "Literacy at Home and at School: Insights from a Study of Young Fluent Readers" In *Awakening to Literacy*, edited by H. Goelman, A. Oberg, and F. Smith Exeter, N.H.: Heinemann Educational Books
- Cole, M. (1985) "The Zone of Proximal Development: Where Culture and Cognition Create Each Other" In *Culture, Communication, and Cognition*, edited by J.V. Wertsch Cambridge: Cambridge University Press
- Durkin, D. (1979) "What Classroom Observations Reveal about Reading Comprehension Instruction" *Reading Research Quarterly*, 14: 481-533
- Ferreiro, E. (1986) "The Interplay between Information and Assimilation in Beginning Literacy" In *Emergent Literacy*, edited by W.H. Teale and E. Sulzby Norwood, N.J.: Ablex
- Ferreiro, E., and A. Teberosky (1982) *Literacy Before Schooling* Exeter, N.H.: Heinemann Educational Books

Goodman, Y (1984) "The Development of Initial Literacy" In *Awakening Literacy*, edited by H Goelman, A. Oberg, and F Smith Exeter, NH Heinemann Educational Books

Goswami, D, and P Stullman (1987) *Reclaiming the Classroom Teacher Research as an Agency for Change* Portsmouth, NH Boynton/Cook

Hall, N (1987) *The Emergence of Literacy* Portsmouth, NH Heinemann Educational Books

Harste, J.C., V.A. Woodward, and C.L. Burke (1984) *Language Stories and Literacy Lessons* Portsmouth, NH Heinemann Educational Books

Heap, J (1985) "Discourse in the Production of Classroom Knowledge: Reading Lessons" *Curriculum Inquiry* 15 245-279

Heap, J (In press) "Writing as Social Action" *Theory Into Practice*

Heath, S.B. (1983) *Ways with Words* Cambridge Cambridge University Press

Heath, S.B. (1986) "Sociocultural Contexts of Language Development" In *Beyond*

*Language Social and Cultural Factors in Schooling Language Minority Students* Los Angeles Evaluation, Dissemination, and Assessment Center, California State University, Los Angeles

Kress, G (1985) *Linguistic Processes in Sociocultural Practice* Geelong, Victoria. Deakin University Press

Langer, J.A. (1987) "A Sociocognitive Perspective on Literacy" In *Language, Literacy, and Culture Issues in Society and Schooling*, edited by J A. Langer Norwood, NJ Ablex

Pinnell, G.S., and M.L. Matlin (1989) *Teachers and Research Language Learning in the Classroom* Newark, Del International Reading Association

Rogoff, B (1989) *Apprenticeship in Thinking Cognitive Development in Social Context* New York Oxford University Press

Teale, W.H. (1984) "Reading to Young Children Its Significance for Literacy Development" In *Awakening to Literacy*, edited by H Goelman, A. Oberg, and F Smith Exeter, NH Heinemann

Educational Books

Tharp, R.G., and R. Gallimore (1989) *Rousing Minds to Life Teaching, Learning, and Schooling in Social Context* Cambridge Cambridge University Press

Tizard, B., and M. Hughes (1984) *Young Children Learning Talking and Thinking at Home and at School* London Fontana

Vygotsky, L.S. (1978) *Mind in Society* Cambridge, Mass Harvard University Press

Wells, G (1986) *The Meaning Makers Children Learning Language and Using Language to Learn* Portsmouth, NH Heinemann Educational Books

Wells, G (1987) "Apprenticeship in Literacy" *Interchange* 18, 5 109-123

Wells, G., G.L. Chang, and A. Maher (In press) "Creating Classroom Communities of Literate Thinkers" In *Cooperative Learning Theory and Research*, edited by S. Sharan New York Praeger

**Gordon Wells** is Professor of Education, The Ontario Institute for Studies in Education, Department of Curriculum, 252 Bloor St., W., Toronto, Ontario M5S 1V6

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