

---

# Cognitive tools and the acquisition of literacy

by Kieran Egan, Faculty of Education, Simon Fraser University  
Excerpt from Working Paper No. 5, The Centre for Literacy, 2001

[This Working Paper is a condensed version of a manuscript that Kieran Egan submitted for the UNESCO Award for Research in Adult Literacy in 1999. When the judges met in April 2000, they agreed that because the submission was not based on empirical research, it could not be given the award. It was, however, an insightful provocative discourse on acquisition of literacy that excited and engaged us all. We felt that it should be acknowledged and shared with a larger audience, and asked Professor Egan if he would allow The Centre to publish a version as a Working Paper. In this paper, he draws on his many years of innovative thinking and publication on the history and philosophy of education, and applies a broad frame of cross-disciplinary reference to the acquisition of literacy. His thesis is that our understanding of the world is shaped by language-based intellectual tools, or what Vygotsky called mediational means” or shapers of the kind of sense we make of the world (*The Educated Mind*, 1997). Egan suggests that understanding these tools can inform approaches to teaching literacy more effectively than either the traditional emphasis on intellectual development as the acquisition of knowledge or the more modern psychological model of intellectual development.]

...What I will do now is make a simple inventory of some of the most prominent characteristics common to oral traditions. This is not to say that all these characteristics are to be found equally in all oral cultures, nor that “orality” is some uniform kind of thinking, or that oral cultures are all alike. But it is to say that the development of oral language has had a profound influence on the human mind and provides our minds with an array of capacities, which we can deploy in greater or lesser degree depending on our needs and circumstances. I will describe these characteristics in no particular order, and, even though I am listing them under discrete sub-headings, it is important to recognize that they are not discrete capacities, but overlap in various ways. The categories I choose are not to be taken as anything more than a convenience for purposes of exposition.

## **Some characteristic cognitive tools of orality**

Each of the following cognitive “tools,” or capacities, has come along with the development of oral language. They are cultural universals, observable in all known human cultures—they seem to be cognitive tools that we cannot not use. They are also tools that do not go away with the development of literacy, even though they are all influenced in one way or another by literacy not always to our advantage.

Consequently they are cognitive tools that literates will recognize as theirs too. I will begin with one of the most complex and general.

## **Story**

All oral cultures use stories, and in all such cultures stories play a central role in the life of the society. Why should this be so? To answer that question, we need first to understand what stories are and do for us. So, what are stories?

I will tell a story in starkest outline and we will see if we can’t quickly identify one of the most important distinguishing features of stories. To begin: “Jennifer walked into the rose

garden.” Well, what do you make of that? Not much, no doubt. It might be pleasant for Jennifer to walk into the rose garden; it might be her favourite moment of calm during her hectic days in the corporate jungle. But she might also be a notorious rose bush poisoner. Not knowing anything else than that she walked into the rose garden, one can’t know whether to feel glad or sorry about it or what to expect next.

One needs to know what caused her action and what is caused by it. So let me add that Jennifer entered the rose garden to give her sad Irish grandfather some news that would cheer him up. Now one might begin to feel a twinge of gladness; good old Jennifer, cheering up the sad old guy.

But as the story goes on, you will discover that this is a crucial event because Jennifer and her grandfather are major drug-dealers, specializing in the youth market. The grandfather is sad because he lacks a specific piece of information that would enable him to pick up a ton of cocaine and deliver it to his network of distributors who are poised to move it into school yards across the city. Jennifer walks into the rose garden to tell her grandfather the location of the cocaine.

Now, your feeling about Jennifer walking into the rose garden will likely be regret. If only she could have been prevented! But wait! I have to tell you further that the information Jennifer carries is a ‘plant’ from her supposed friend, Marsha, who is actually an undercover cop. Jennifer’s disclosure of the location of the cocaine and the grandfather’s immediate attempt to grab it spring the trap that enables the police to arrest Jennifer, the evil Irish grandfather, and their whole network of dealers and distributors. The key was to have Jennifer give the false information in the rose garden. Now, you will likely feel glad that Jennifer walked into the rose garden, springing the carefully laid trap.

One could perform the same simple analysis on a fairy-tale, of course: “The hungry children came upon a lovely cottage made of gingerbread and candies.” What a relief, as they were lost in the forest and starving! But...

*We cannot program a computer to recognize a story  
as distinct from other narratives. The instrument  
for detecting stories is human emotion.*

One knows how to feel about Jennifer’s walking into the rose garden only when the story is finished. Indeed, that is how we know we have reached the end of a story—we know how to feel about the events that make it up. We cannot program a computer to recognize a story as distinct from other narratives. The instrument for detecting stories is human emotion.

So the kind of meaning stories deal with has to do with our emotions. Stories are instruments for orienting our emotions to their contents. That is, stories do not just convey information about events and characters, nor do stories just convey information in a way that engages our emotions; stories orient our emotions to the events and characters in a particular way. They convey information while directing us how to feel about it. No other

form of language can do this, and so no other form of language can achieve the range and kinds of effects that stories can. The story is like a musical score and our emotions are the instrument it is designed to play.

The great power of stories, then, is that they perform two tasks at the same time. They are, first, very effective at communicating information in a memorable form and, second, they can orient the hearer's feelings about the information being communicated.

In an oral culture one knows only what one remembers, and as the story is one of the most effective forms for encoding important social information in a memorable linguistic construction, it is used universally. In addition, it can shape the emotions of the hearer to respond to its contents as can nothing else. For these reasons we literates continually tend to shape our histories from a pure account of what happened towards some story that carries a moral about the virtues of our country or people, highlighting "our" beliefs and values over those of other countries' and people's. We deploy stories constantly in our daily lives to give emotional meaning to what would otherwise remain, as it has been eloquently put, "just one damn thing after another." Stories shape events into emotionally meaningful patterns.

Relatedly, participants in oral cultures tend to be much more efficient than is common for literates in using their memories. In their cultural conditions, lacking literacy, memorizing is obviously vitally important. When anthropologists in the late nineteenth and early twentieth-centuries approached oral communities with the presupposition that they were, relatively, mental incompetents, they were faced with odd anomalies. Lévi-Bruhl described various prodigious feats of memory that were commonplace to the people he was studying. He summed it up like this:

This extraordinary development of memory, and a memory which faithfully reproduces the minutest details of sense-impressions in the correct order of their appearance, is shown moreover by the wealth of vocabulary and the grammatical complexity of the languages. Now the very men who speak these languages and possess this power of memory are (in Australia or Northern Brazil, for instance) incapable of counting beyond two and three. The slightest mental effort involving abstract reasoning, however rudimentary it may be, is so distasteful to them that they immediately declare themselves tired and give it up. (Lévi-Bruhl, 1910/1985, P. 115).

Now there are some difficulties in Lévi-Bruhl's way of putting this, due in part to his assumptions about the "prelogical" and "mystic" nature of "primitive mentality. His subjects, for example, do not so much have a "power of memory" as a highly developed set of techniques for learning and remembering. Also I will argue below that the problem for his subjects does not lie in "abstraction" as such—a common assumption also applied to children's thinking—but rather in the dissociation of thought from matters embedded in one's lifeworld—"decontextualization," as it has been called. Goody, for example, describes his innocent request of some LoDagaa to count for him. "Count what?" was their, to them, obvious question. They had a number of sophisticated forms of counting, and an abstract numerical system, but their methods of counting cows and cowrie shells

differed. Nor, as we shall see, is “abstract reasoning” beyond anyone with a human mind; it is just that certain particular mental capacities involving abstraction that are very heavily dependent on writing are not easily available to people who do not write or read.

Nevertheless, Lévi-Bruhl describes the apparent anomaly of mental prodigies in the supposedly mentally deficient. He perceived that there were no differences on any simple scale of mental superiority/inferiority, but that the conditions of life in oral cultures stimulated different mental developments to deal with those conditions. And he was precise in locating a wide range of these differences. The uses of memory in oral cultures, he concluded, “are quite different because its contents are of a different character. It is both very accurate and very emotional” (Lévi-Bruhl, 1910/1985, P. 110).

The emotions are engaged by making the culturally important messages event-laden, involving characters and their emotions in conflict in developing narratives—in short, by building the messages into stories. “All myths tell a story,” Lévi-Strauss points out (1966, P. 26), and Albert B. Lord concluded his account of the constant reconstruction involved in reciting epic poems by showing how the story provided a firm basic structure. The formulas and groupings and meter in the end “serve only one purpose. They provide a means for telling a story .... The tale’s the thing” (Lord, 1964, p. 68). We find these techniques in greater or lesser degree in all oral cultures: “At different periods and in different cultures there are close links between the techniques for mental recall, the inner organization of the faculty (of memory), the place it occupies in the system of the ego, and the ways that [people] picture memory to themselves” (Vernant, 1982, P. 75).

In considering the transition to literacy, then, we will want to consider what happened to the story. And if we want to teach literacy, we might do well to observe both what happens to stories in the historical transition and, more importantly, that those we teach will likely have a highly developed sense of how story can be used to give shape and meaning to events. Obviously, we will not be wise to ignore the capacities our students possess, and might seek techniques that build literacy on the cognitive strengths they currently possess.

.....

Egan goes on to elaborate on metaphor, binary oppositions, rhyme and rhythm, jokes and humour, gossip, images, and embeddedness in lifeworld as other cognitive tools of orality that should to be considered in the acquisition of literacy.

Kieran Egan has won praise and awards for his publications. Lists of titles and excerpts are on his web site at [www.educ.sfu.ca/people/faculty/kegan/default.html](http://www.educ.sfu.ca/people/faculty/kegan/default.html)

The Working Paper can be ordered from The Centre for Literacy. It will be up our web site in early February 2002.

---