The importance of learning styles in literacy

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Originally published as:

Lingenfelter, Judith, and Claire Gray. 1981. "The importance of learning styles in literacy." *Notes on Literacy* 36:11–17. See also: Lingenfelter and Gray 1981 (in *Bibliography (Literacy)*) Lingenfelter and Gray 1981 (in *Bibliography (Linguistics)*)

[Topics: learning styles]

1. Introduction

Many literacy workers in various parts of the world have expressed deep frustration over the fact that the groups of people they are working with seem unable to grasp the concept of reading. SIL literacy specialist courses prepare students to produce primers according to the Gudschinsky method. These courses do this very well, and so when those students take their place as translators or literacy consultants in later years, Gudschinsky's *Manual of literacy for pre-literate peoples* plus the training allows them to approach the idea of primer making with a certain degree of confidence. And, for many translation teams, the results are rewarding—the people do seem to understand the expectations. For other teams, however, the literacy phase of their work proves extremely frustrating; the people just do not seem to understand what reading is all about. They may see a word as a whole but are unable to break it down and re-combine its syllables to form new words. In both *READ* and *Notes on Literacy*, frequent articles seek to answer that perennial question, "What do I do with a class that memorizes a book rather than reads it?" Literacy personnel might greatly benefit from the research being done in educational anthropology and in cognitive learning styles; by adapting ideas gained from such study, they may find alternative strategies for more effective approaches to these difficult literacy problems.

2. Anthropology and education

One of the strongest anthropological tenets is that cultures throughout the world demonstrate normal intelligence patterns. That is, the people of any given ethnic group will have some highly intelligent members and some extremely slow members, with the rest falling somewhere in the middle. Anthropologists reject the notion that an entire group could be equally slow, unless there is some serious genetic defect present. Assuming that this position is correct, field linguists/literacy workers who find their population overwhelmingly "slow" may be responding (because of their own cultural "baggage") to cultural factors rather than to those of intelligence.

Anthropologists define education as cultural transmission. In other words, formal schooling as we know it represents only one segment of the entire educational process. The rest takes place in such situations as workshops, dormitories, and households. Every time a mother reminds her child to brush his teeth, she is participating in the total educational process of that child. In societies without any formal schools, children still learn all the things necessary for them to survive in that culture. Usually, learning takes place on a one-to-one basis, as in cooking and canoe building. Where formal schooling exists, the focus is changed from personalized teaching to group teaching.

Formal training in literacy or linguistics represents only one element of what is taught at a typical school. For example, the concept of time is one cultural "lesson" that students learn to adhere to, although it is not formally taught in the classroom. At the British SIL, this teaching is strongly reinforced: classes, meals, and chapel begin "on time," and students even request time checks at breakfast in order to synchronize their watches so they will not be late to class. This rigid concept of time is often carried to another culture quite unconsciously, and has caused untold problems to literacy workers who insist that meetings and classes start "on time."

Another cultural element commonly learned at SIL is the compartmentalization of knowledge. Curricular matters are studiously worked out so that the information to be learned is placed in the context of specific subjects (for example, anthropology, translation principles, and so forth) which meet for definite lengths of time on scheduled days. Teachers struggle to avoid duplication or overlapping with other courses. Unfortunately, sometimes a hidden result is the students' failure to see the Bible translation task as a unified whole. The designation of field personnel as "linguists," as "translators," or as "literacy workers" serves to increase this feeling of compartmentalization.

A third piece of cultural "baggage" involves the relationships and expectations of students and teachers. Students sit quietly at desks and acknowledge the teacher as an authority by taking notes, looking at the teacher as she or he speaks, and requesting permission to talk. The teacher in turn encourages questions, writes on a chalkboard or a transparency for the overhead projector, and requires homework and tests as measurements of what students are learning.

These cultural expectations of schooling can cause serious culture clashes if unrecognized as such. In Ghana, one SIL member related the story of the first test she gave to her literacy classes. She discovered that someone who had taken the test earlier was patiently coaching all the students who had not yet taken it. The student was dumbfounded at the teacher's negative reaction; he explained that he was only trying to keep his friends from losing face by doing poorly. After all, the teacher wanted everybody to learn to read, didn't she? This incident reminds us that the concept of a test has a meaning which needs to be verbalized and explained, rather than assumed. If characteristics of formal schooling really must be

incorporated, perhaps literacy workers should concentrate on teaching *school context* before attempting to teach reading. Preliterate peoples need to spend more time learning about such concepts as teacher authority, daily routine, tests, time, and so forth. Once ideas are understood in a new context, formal schooling proceeds much more quickly.

3. Cognitive learning styles

The thought processes people use to understand an unfamiliar context illustrate one aspect of the research on cognitive learning styles. Out of the wealth of information slowly accumulating on the topic, this article will focus on one of the earliest research efforts, that of Rosalie Cohen. Her original work provides the simplest contrasts for understanding learning style differences and will be cited in this article, although they represent extremes, not norms.

Cohen defines conceptual or cognitive styles as rule-sets for the selection and organization of sense data. This style operates without reference to innate ability, that is, intelligence. This is an important point, because people tend to equate the two concepts and, thus, put value judgments on the cognitive styles. Her article assumes a normal intelligence curve in any given group, and concentrates on how people process information.

Cohen isolates two opposite processing styles, analytic and relational. Table I illustrates a few of their respective characteristics.

Table 1 Characteristics of the two major conceptual styles

Analytic	**Relational**
Field independent	Field dependent
Parts-specific	Global characteristic
Stimulus-centered	Self-centered

These characteristics can perhaps be most easily defined by putting them into a specific context to see how they cause a person to operate in a given situation. Field independence might characterize a person who does well in the SIL grammar course, for example. The ability to abstract a grammatical form from its context enables her or him to identify and classify elements of the language. The Gudschinsky primers

exhibit the parts-specific skill by breaking down a word into its component parts (for example, *agogo* into *a-go-go*) and re-combining them in several different ways. A stimulus-centered person is one who can follow a task through to its conclusion without becoming diverted.

Relational people, on the other hand, have a much greater field dependence and exhibit great difficulty in abstracting from a given context. They are most comfortable when they have a pattern to follow, and they often develop great anxiety when asked to generate something which has no model to copy. The global characteristic means that a relational person sees the word *agogo*,but does not really understand how the syllables can be a part of the word. The word is *agogo*, and to them *go* has nothing to do with *agogo*. The self-centered trait in Table I refers not to a pejorative personality term, but rather to the ways in which that person relates to other parts of his or her environment. For example, dormitory roommates, Analytic student A and Relational student R are both studying for a test to be given the next day. The phone down the hall begins to ring. Student A continues working, whereas, Student R jumps up and runs down the hall to answer it, without thinking that it will probably entail either taking a message or trying to find the person being called; tasks which detract from study time.

Many American and European school systems endeavor to teach analytic thinking almost exclusively in their curricula. Even before middle class children reach school age, they have already begun to think analytically through playing with their toys. Puzzles and "educational" toys teach children how to discriminate, break apart, and re-combine. Then, school reinforces this by teaching the students how to abstract ideas from paragraphs, how to use mathematics in problem solving situations, and so forth. Yet, at the same time, the child must employ relational thinking in everyday situations. Relational thinking is much more efficient for learning most routine knowledge and tasks. Domestic activities are not taught by analysis, but rather by habit and example. The little boy who learns how to brush his teeth does not analyze the task each night when he goes to bed; he does it from habit (even if the cue is his mother's daily reminder). Language learning is also relational rather than analytic; children learn whole utterances in a behavioral context.

To apply these two polar conceptual styles to literacy, one needs to examine the learning-related characteristics of both analytic and relational learning.

Table 2 Learning-related characteristics

	Analytic	**Relational**
Attention span	Can sit still a long time	Short attention span
	Not easily distracted by nonrelevant	

Distractibility	sounds and movements	distracted
Related school behaviors	Sees teacher as source of information	Sees teacher as individual
	Motivated to achievement goals	Not motivated to achievement
	Reflective attitude	Impulsive
	Sedentary	More active
		Affectionate
		Easily gives up on difficult tasks

There are several dangers in presenting the material in this fashion. First, one can blame too many things on conceptual style and ignore other intervening variables. Table 2 could support the value judgment that analytic thinking is superior to relational [thinking], because its traits mirror the values inculcated into students by the various European and American school systems. Many an adult well remembers being reprimanded for not paying attention in class, and the threat of a test nearly always spurred people to do their homework—lest they not pass on to the next grade with their classmates. By extension, literacy workers have generalized that all Western cultures are analytic and that all preliterate, non-Western cultures are relational.

Also, if readers have been following closely, the use of both male and female pronouns in this article is not just a concession to *women's lib,* but rather represents another fallacious line of reasoning, that all males are analytic and all females are relational. Cohen refutes these conclusions in her research. Instead

of age, race, or sex, she indicates that one's family and group relationships largely determine style. Does a family member's needs come before a homework assignment? Does the family do things together naturally, or does each member go his or her separate way and only meet at such scheduled times as supper and Bible study? Does the family derive geographic and emotional support from relatives, or do they exist almost entirely on their own? These are just a few of the questions Cohen uses to decide how these styles are determined. Cohen's rationale for the development of these styles may well be open to other interpretations in addition to family.

If family relationships largely determine conceptual styles, then those cultures which emphasize tradition and continuity are more likely to give negative sanction to analytical thought. In a culture where elders traditionally admonish younger members to do things the "right" way, the younger people usually try to follow the model given, because the social pressures to conform are great. Take, for example, the case of the two Micronesian boys who lived for six years in the home of one of the authors. Although related, one was inclined to be relational while the other favored the analytic. Student A did very well in the American school system, because he possessed a strong ability to analyze and abstract. Student R, although intelligent, had a great deal more difficulty understanding the demands of college work. However, when the two students returned to Micronesia, Student R adapted fairly quickly and is a real credit to his father. His ability to grasp a situation in its context has helped him immensely in his job. Student A, on the other hand, has had great difficulties in adjusting to the cultural demands. In Micronesia, his ability to abstract and question labels him a "smart aleck," and older people do not take too kindly to his ideas for change.

4. Alternative strategies

How can literacy materials reach those whose cultural demands reward relational thinking? The Gudschinsky primer series is aimed at those ethnic groups who favor analytic thinking, and many have become literate as a result of these materials. But what about those people who seem to memorize words in rote fashion and are unable to follow the logic of the ABCDE boxes? The authors have noted that the majority of SIL consultants accept the Gudschinsky primers as the only "right" ones. While standards are very necessary to maintain the quality of the work produced by SIL, literacy goals might be furthered by expanding the range of "acceptable" primers to include some which have been adapted for relational thinkers.

Such a strategy was used by a team in Ghana. Ian and Claire Gray worked among a group of approximately 90,000 Bulsa people in northern Ghana. English served as both the official and prestige language, and children attended English-speaking schools. Their dropout rate was very high and their retention rate was correspondingly low. Claire realized that Bulsa children memorized quickly, and she decided to build on this tendency rather than to try and discourage it. When she talked to officials at the Ministry of Education, they told her that their experience indicated that most children learned more quickly if they memorized a core of about 100 words first. Using this idea as a base, Claire eliminated the idea of preprimers completely, because she felt the numbering was confusing and the concept misleading. Instead, she started with Book 1. In it, she used a total of only 16 words, all key concepts in the Bulsa language. Students discussed these words at length and committed all 16 to memory.

In Book 2, Claire reintroduced the 16 words and added a simple frame word equivalent to "this is." She utilized a few keyword breakdowns, but chose only those in which the breakdown had meaning in itself.

Example

kaniak 'lamp'

Ababa 'boy's name'

ka 'this is'

nikanika 'grinding mill'

Students quickly assimilated these breakdowns because the syllables carried meaning. This is obviously easier in a language with a CV pattern, because languages with a CVC pattern would be broken apart differently. In addition, throughout the book she continued to use such preliteracy ideas as, "Which grinding mill in the row is different?" Book 2 became so popular that even the Ministry of Education official who looked at it complained that it ended too soon!

In Book 3, Claire used simple stories and expanded the vocabulary to about 80 words. Still, however, she did not attempt to break more than a few words apart.

In Book 4, Claire began teaching analytic skills by again using those words whose syllables carried meaning, then gradually introducing words (in box form) whose syllables did not carry meaning. By then, students felt fairly confident of their abilities and were able to make the transfer with little difficulty.

For Book 7, a Bulsa man (who worked for the Ministry of Education) wrote an entire post primer about the life cycle of a Bulsa family. The primer was based on the previously learned vocabulary and divided into chapters.

The Grays' reading program succeeded, largely because new skills were not attempted too quickly. By memorizing a core vocabulary, the Bulsa readers used a known skill to bolster their confidence. Once they had memorized whole words and had learned to break apart those words whose syllables also held a separate meaning, they were much more eager to move on to those concepts which were new and different. The Bulsa had to first learn the context of the Grays' school classes, then they had to grapple with the concept of reading itself. Instead of penalizing students for memorizing, Claire rewarded it and used it to bridge the transition between relational and analytic skills.

5. Conclusion

To understand the importance of learning styles in literacy work, one must recognize their existence apart from native intelligence. Both relational and analytic thinking have definite value, relational because it is more efficient, and analytic because it helps generate new ways of doing things. If a translation team senses that a particular group rewards relational thinking, they might consider developing a primer series which capitalizes on memorization skills. Correspondingly, literacy consultants (who check and approve primers) might want to expand their own ideas of what constitutes an "acceptable" primer series.

Reference

Cohen, Rosalie. 1969. “Conceptual styles, culture conflict, and nonverbal tests of intelligence.” *American Anthropologist* 71(October 1969): 828–856.
Citations