Because of extremely low salaries paid to teachers in the Brazilian public school system, the profession increasingly attracts only persons from the lower income levels who may not themselves be comfortable with the literacy skills they are supposed to teach. Working under extremely hard conditions, and being ill prepared for her profession, the teacher tends to blame various cultural lacks or deficits in her students to explain their failure to learn. The fallacy of this "deficit hypothesis" can be shown by examining textbooks used to teach reading and in classroom research. Reading textbooks place heavy demands on students' capacity to manipulate discrete elements of text, and no demands on making sense out of text. In one experiment, 40 eighth-grade students were divided equally into experimental and control groups. The experimental group was given a passage and told to write a summary without being able to look at the passage while the control group was allowed to look at the passage. Results indicated that all of the experimental group used integrating, combinatorial rules in writing the summary, while only one of the control group was able to use such rules. In another experiment, 53 eighth-graders were divided into two control groups and one experimental group. The control groups read one of two versions of a passage in which different lexical choices were made. The experimental group received both versions of the text. Results indicated that students who had access to only one version were incapable of perceiving the discourse value of the words in question, whereas students who had to focus on whatever differences they could perceive between the two versions were able to perceive the discourse value of the same words. Findings of both experiments suggest that students showed a remarkable capacity to deal with text and written discourse. They also indicate the fallacy of all types of deficit theories which permit ethnocentric interpretations that only disguise the true causes of student failure. (Fifty-five references are attached.) (RS)
1. THE PROBLEM: BECOMING LITERATE IN ADVERSE CIRCUMSTANCES

The failure of the teaching of literacy skills in the Brazilian public school system is widely acknowledged, being amply documented by research, teacher reports and statistical data about pupils' non-attendance and repetition of courses. Many are the causes postulated to explain the problem, among the most valid being socioeconomic and political factors (Patto, 1990; Zilberman & da Silva, 1988; da Silva, 1986; Freitas, 1989; Soares, 1986).

Among these factors, one which has become increasingly relevant is the failure of the higher school system, i.e., university and teacher training colleges to attract people who are both exponents of the culture they have to teach, and members of the social group they are supposed to represent. Because of the extremely low salaries being paid to teachers in the public school system, ranging from less than a minimum salary ($50.00 a month) in the Northeast to a little above $150 in rich states like São Paulo, the profession increasingly attracts only members of the lower classes for whom becoming a teacher represents a step up in the social mobility ladder (Signorini, 1990; Kleiman, Bortoni & Cavalcanti, 1990).
Such teacher trainees, we find, have not been primarily socialized in a literate environment, in the sense defined by Heath (1982, 1983) Taylor (1985), Street (1984), where the written word is an integral part of communicative activities, and are thus ill-adapted to acquire those literacy skills they are supposed to teach. Excepting a few private and public universities, the great majority of higher level institutions, responsible for the training of over 90% of public school teachers, fail to form teachers who feel comfortable as readers and writers (Signorini, 1990, da Silva, 1986).

The failure of the higher school system can only be reflected, and worsened, at the primary and secondary school levels. The teachers themselves have a very poor self-image related to their job, their success as teachers, and their status in society. It is worth noting that they compare themselves, and their needs and reinventions, to those of factory workers, and they come out losers in the comparison (Patto, 1990). They look around for causes for their problems, and many times they blame the other victim of the system, the student.

In the first four grades, the student body usually comprises children from the lower classes, who live in favelas, and even in the streets, and who inevitably fail (Carraher, Carraher & Schliemann, 1989; Freire, 1989). From fifth grade up, the student body is considerably reduced (according to Brandão, 1983, 294 children out of 1000 make it
to the fifth grade); yet the failure rate among these students is also extremely high, since out of those 294 students, only an estimated 180 manage to stay in school up to the end of the primary school level, the 8th grade.

Working under extremely hard conditions, and being ill prepared for her profession, the teacher blames the student for the school failure. Such an attitude on the part of the teacher is, as could be expected, self-defeating, and perpetuates the cycle of failures. It leads easily to discrimination, since one of the reasons for the school failure is invariably ascribed to some sort of deficit on the part of the students.

Genetic deficit theories being unpopular, the teacher resorts to linguistic and cultural deficit theories to explain the students' failure (cf. Erickson, 1987). Thus, she justifies her inability to teach literacy skills to her students because of the child's hunger, his broken home, his lack of a home, his lack of an adult role figure, his family's lack of consciousness of the importance of education, and so forth (see, for example, Franchi, 1988; Freire, Nogueira & Mazza, 1990; Patto, 1990).

A very common solution to the problem is what we might call the 'affective approach' (cf. de Mello, 1987). The child, besides being poor, is unloved, and it behooves the teacher to supply that love which is lacking at home. Such an approach effectively hides the lack of technical and
professional competence on the part of the teacher.

We consider such an approach a very poor substitute for technical competence, and our work in in-service teacher training aims primarily first at developing literacy skills of the teacher’s themselves in the area of reading (Kleiman, 1989b) and second, at engaging in classroom research which shows up the fallacy of the deficit hypothesis to explain supposed failure to read (Kleiman, 1989a). It is this second aspect of our work which we relate in the paper.

2. THE READING LESSON

The reading class places heavy demands on the students’ capacity to manipulate discrete elements of text, and no demands on making sense out of text (see Spiro, Bruce and Brewer, 1980; Flood, 1984, as examples of this interactive, meaning-building approach to reading). This is a direct consequence of the type of practice and exercises found in the textbook. Because of work conditions such as those outlined above, the teacher, trying to make a living out of teaching, assumes an inordinately heavy workload (40 hours of actual classroom work is the norm), and, thus, comes to rely almost exclusively on the activities presented in the textbook, which emphasize a word or phrasal approach to text rather than a textual approach.

Reading activities in textbooks focus on the identification of words which supposedly signal structural elements, as in the following analysis from a 4th grade book,
where what is being called 'part' does not represent a semantic unit but merely corresponds to the paragraphs in the text under analysis:

(1) O texto pode ser dividido em quatro partes: 1a. parte: Introdução: meus amigos prediletos; 2a. parte: Zezinho; 3a. parte: Curiô, .... ("the above text can be divided into four parts: 1st part: Introduction: My favorite friends; 2nd part: Zezinho; 3rd part: Curiô,...")

In the same textbook, the text comprehension activities include the following:

(2) Copie a primeira parte do texto (Copy the first part of the text)

(3) Complete: A segunda parte começa em ...... e termina em........... (Complete: The second part starts in ......and ends in ........)

leaving no doubts as to the criterion for determining parts in a reading selection.

Approaches of this type are not characteristic of just the lower grades: in one quite popular series of textbooks, all seventeen reading selections in the eighth grade textbook include comprehension questions consisting of the identification of graphic-based parts of the text, regardless of the genre involved.

Almost all textbooks in use in the state of São Paulo (and the number of publications is staggering, being a very lucrative market, with no quality control, cf. Molina, 1987) favor comprehension questions based on the explicit information in the text. Thus, for example, if the text (2nd
grade) states "Passarinh, passarinh, que vives no meu pomar" (Little bird, little bird, who lives in my orchard), invariably, a question about explicit information will be asked as in

(4) Onde o passarinh vive? (Where does the little bird live?)

It is equally likely that the author will include an exercise asking the student to underline all those words that have the group "nh", using the reading selection for a variety of activities, such as copying, identifying and matching words, spelling, and almost everything but comprehension.

Because of this and similar reading activities, we note that the student seems to have lost what Bolinger (1977) calls the view of "language of the man on the street, who would not find it surprising that 'if two ways of saying something differ in their words or their arrangement they will also differ in meaning" (1977:1). Our students believe, as our data show, that 'It is raining' means the same as 'It is probably raining' in written language.

It is possible to trace such a student's belief to the types of tasks the school favors. The student must, as a rule, substitute words in the text for its synonyms, and answer questions about material that is explicitly written in the text. Rarely do we find questions or activities which go beyond the actual words found in the text, in order to reach
the discourse, that is, activities which go beyond the words and between the lines to arrive at the author's meaning.

Faced with this type of "comprehension" activity, students acquire reading strategies which involve text fragmentation, sequence recognition, and word matching, rather than the integration of the parts into a whole semantic unit. Such a response is to be expected, if we accept Bartlett's hypothesis regarding the learning tendencies of the individual to make those reactions to the environment which he feels are adequate and which are also "the easiest or the least disagreeable, or the quickest and least obstructed that is at the time possible" (1932:44). In other words, why engage in higher level intellectual activity, if lower level automatisms will do?

Throughout the development of our in-service teacher training program and research project, which lasted three years and involved primary school classes (from third to eighth grade) we detected several textual strategies, which, to us, seemed to have been developed in response to reading task requirements. Since these approaches were extremely limited, and could very well reflect shortcomings, a common hypothesis to explain such behavior would be, as already mentioned, a "deficit hypothesis".

Even a maturational hypothesis, such as those advanced by cognitive psychologists specialised in reading (Brown, 1980; Brown & Day, 1983; Brown, Campione & Day, 1981; Brown &
Smiley, 1978) can lead to dangerous interpretations in a context such as ours. By this hypothesis, children's performance in reading tasks compares unfavorably with adult or more advanced colleagues' performances in similar tasks, because the skill needed for task completion is not yet developed; it would be acquired later in life, say in high school or college, when the child is older and has gone through more years of schooling. Most of the studies along these lines show that it takes quite a long time for the child to achieve adult-like proficiency, a factor which becomes alarming in a situation like that of the Brazilian school system where the vast majority (70%) of children does not complete primary school, abandoning school usually after the first four years.

An alternate hypothesis, based on Vigotsky's theory of learning and development (1962, 1978) permits us to assume that these children, though deprived of opportunities for developing integrating holistic reading strategies could still make use of them in an interpersonal situation, where the adult teacher, or her equivalent in an experimental situation, shows the way by limiting the range of options for solving the specific task. To clarify: instead of presenting a given reading problem and permitting the student a set of possible solutions for the problem, some of those solutions, i. e., those judged inadequate because they were based on fragmentation and mere word recognition and matching, were
prevented from being used. Such prevention was accomplished, in the experiments we are about to relate, by devising sets of instructions which forced the experimental groups to use integrating reading strategies and, therefore, go beyond that which was explicitly stated in the text.

If we could show, as we did, that these children, in spite of a history of failures as readers, and in spite of the teaching procedures to which they had been subjected could still show ability to make sense out of text, then any deficit interpretation, be it cultural, linguistic, or developmental, would be unwarranted.

3. TWO EXPERIMENTS

1 Summary tasks

Since the ability to perceive the macrostructure of a text correlates positively with the ability to summarize, one of the tasks we devised (for fifth and eighth graders, though we will discuss here only the eighth graders' results) involved making a summary of an expository text. Forty eighth graders were randomly divided into two groups. The control group was given the instruction to read the text, and then make a summary of it. The experimental group had the same task, but was given the additional instruction that the text would be withdrawn after he was through reading it and before starting the summarizing task. Thus, the control group member knew that he would be able to consult the text while making the summary, while the experimental group knew that he
would not have the text available for consultation while he was summarizing it. (Terzi & Kleiman: 1985).

Our hypothesis was that the group that knew that they would not have the text available for consultation during the test would be motivated to use rules which integrated different parts of the text into one semantic unit (Kintsch & van Dijk, 1975) unlike other schoolchildren described in the literature (Brown and Day, 1983), who had been shown to mostly use fragmentating rules which copied and deleted those parts of the text which, in their judgment, were the least important in a chosen unit (usually a proposition or a paragraph). Those children seemed incapable of judging the importance of those parts relative to the whole and of constructing macropropositions which effectively integrated the different parts of the text.

The hypothesis was confirmed. Out of the twenty students in the control group, only one child used integrating, combinatory rules, thus showing his use of adequate reading strategies regardless of task environment. We could say that this child had internalized adequate semantic reduction rules and was able to use them independently, without any help from the adult. If we consider next just the responses of the other nineteen children in the group, we would be forced to say that in that grade level children had not yet developed the capacity to use integrating summary rules. Such a conclusion is unwarranted, however, when we consider the data from the
experimental group, which was formed by children who were classmates of the control group, where the basis for the grouping was seating arrangement in the classroom, and not reading level. In the experimental group, all the twenty children were capable of constructing a topic sentence which adequately summarized the topic of discourse and which was general enough to integrate several pieces of information found in the text.

The children's answers in the experimental group were extremely homogeneous regarding thematic information, showing more dispersion only with regards to secondary information; i.e., there was no total agreement as to the subtopics included in the twenty summaries. On the other hand, the children showed, by their choice of topics and subtopics that they were aware of the relative importance of the propositions in the text, and of the existence of a generalizing macroproposition, to be inferred, which could comprise the diverse elements found in the text.

Such an awareness was not apparent in the answers of their classmates, who were also an extremely homogeneous group in their inability to perceive the whole because of its parts. They were also homogeneous in the strategy adopted: they chose a reading unit, which was a sentence or a paragraph, and decided, for each unit, which elements to copy into the summary and which elements to delete (cf. Brown & Day, 1983). They were also homogeneous in their deletion
choices (adverbs and adjectives were consistently deleted) and in the structuring of their own texts, which followed exactly that of the original text (a fact to be expected since the strategy seems to be both partial and sequential: the paragraphs or sentences are evaluated, for inclusion or exclusion purposes, in the same order in which they appear in the text). No such structural and sequential homogeneity was detected in the experimental group.

Other consequences deriving from the copy and deletion strategy had to do with the coherence and cohesion of the texts produced. The control group showed, through lack of cohesive devices and intertextual references, that the student was building a network of references not just within his own text, but also with the original text, which also served as a framework of references, and thus helped to create several intertextual ties which many times rendered their texts incoherent. In many cases the students' texts were coherent only if the original text was maintained as a framework of reference by the evaluators. Such intertextual dependence was not present in the experimental group.

We can say, therefore, that both from the point of view of reading strategy (capacity to perceive theme and main ideas) and from the point of view of summarizing strategy (capacity to write a structured, coherent summary) the two groups differed markedly; and that the experimental group showed capacity to use integrating rules which, according to
results obtained elsewhere, would be used only by college level students (Brown & Day, 1983).

11 Perception of lexicon in text

The second task we wish to report had to do with the ability to perceive propositional attitude. It had become obvious to us, both from class observations and from the results in other reading tasks, that the students had developed a conception of meaning that considered it a property of certain words, mainly those denoting objects, actions, and qualities. Expressions that lexicalized attitudes, beliefs, psychological states were thought to be meaningless; furthermore, the students, as a rule, ignored that larger units, such as text, had meaning which was not the sum of the meaning of its individual parts.

We devised a task whose resolution depended on the student's ability to perceive the author's propositional attitude evident from his lexical choices in two texts (Kleiman, 1989a). In the example that follows, translated from Portuguese, we illustrate the type of lexical choices we used, in italics. In the actual experimental task the students were given two versions of the texts, one for each of the text-based propositional attitude italicized here:

The idea of a nuclear war, in which certainly there will be neither winners nor losers, or, better still, there will be only losers, seems to be more remote today than in the 50's. The first two partners of the so-called nuclear club - USA and USSR - claim to make an effort/make an effort in order to avoid the use of hydrogen bombs and prevent other countries from building
them. They mention as an example /gave as an example of that apparent effort/effort (with) the signature in Moscow, in 1963, of the Treaty for the Proscription of Nuclear Experiments, and the invitation to all countries to sign it as well.

Fifty-three eighth graders, divided into two control groups and one experimental group were tested. Both control and experimental groups had to answer questions after reading the text and they had to justify their answers. The questions were the same for all groups (i.e., "Does the author believe in the efforts of the first partners of the nuclear club?", "Does the author believe in the value of the treaty?", etc.).

The control groups (27 students in all, divided into two groups) had to read one of the two versions of the text, and had to answer afterwards the questions exemplified above. The experimental group (26 students) received both versions of the text, with an instruction that stated that the texts were about the same subject but presented two different points of view and that they should answer the questions after each of the texts once they had read and compared them. Each version of the text was followed by exactly the same questions of the type exemplified above.

Our hypothesis was that the students who had access to only one version of the text would be incapable of perceiving the discourse value of words in question, whereas the students who had to focus on whatever differences they could perceive between the two versions of the text would be able, because of
that forced focus on comparison, to perceive the discourse value of the same words. That is, the set of instructions would point to one plausible set of solutions, thus playing a role similar to that of the guiding adult.

Again, our hypothesis was confirmed. Only one fourth of the students in the control group (24%) were able to perceive the author's attitude regarding the truth value of the propositions in question. Typical answers were contradictory, as in "the author believes and does not believe; he believes because the two superpowers are afraid of each other and does not believe because the USA continues testing the bombs", showing that the student was unable to perceive the function of the words denoting propositional attitude and to disassociate the author's attitudes and beliefs from his own.

With respect to the experimental group, two thirds (64 per cent) of the students were able to perceive the author's attitudes in the comparison task. Unlike the control groups, which demonstrated confusion in their answers, the students in the experimental group were capable of detecting one attitude and of justifying their answers through relevant linguistic evidence, as in "No, because the author says 'claim to make an effort', which is like saying who knows whether they are really making an effort".

If we consider just the responses of the students in the control group, we would have to say that the majority of the children in the eighth grade were incapable of perceiving the
discourse function of lexical items, in observation which would be perfectly consonant with other test results, and which would be expected given the type of comprehension exercises which constitute the norm in the textbook and, therefore, in the classroom. Such an observation, however, would be inaccurate in view of the results obtained in the experimental group, and, more importantly, would lead us to a view of the development of reading strategies in the school child which is potentially damaging and restricting, since it places the burden of learning on maturation, and on the child's acquired abilities, rather than placing it on the child's cognitive potential and on the guiding adult's planned teaching and modeling.

4 CONCLUSION

Even in such an adverse situation as being tested by strangers, students show remarkable capacity to deal with text and written discourse, rather than with words and other discrete units, when they are directed in non-obvious ways to developing more adequate or satisfactory attitudes and strategies.

The research results can be used to demonstrate to teachers the necessity of providing instruction for the development of adequate reading strategies, a conclusion which would be unnecessary in other contexts. These two studies can also be used to show that the students' inability to use
semantic integration rules when summarizing, to perceive macrostructure, to detect propositional attitude, and to perceive the discourse function of lexical expressions may be a consequence of the instruction they have been given. Finally, they can be used to show the fallacy of all types of deficit theories, which permit ethnocentric interpretations of failure which can only disguise the true causes of failure (see Freire, 1967, 1976), and postpone the search for solution.

In the Brasilian educational system the teacher is left to cope as best she can. Besides being denied some basic economic requirements for reducing her teaching load, and thus being able to prepare her lesson, she is denied adequate resources, like textbooks, which might obviate the shortcomings of lack of planning. She is further denied a course which prepares her for coping with the technical requirements to do her job properly. For these reasons, classroom oriented research which starts questioning some practices and presuppositions about learning and reading, shows them to be inadequate and unfounded, and relates these results to teacher training and in service programs can be a positive, even if small, aid towards changing the picture of the Brasilian public school system.

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REFERENCES


