

THE READING LABORATORY: AN ATTEMPT TO IMPROVE THE READING  
SKILLS OF STUDENTS AT COLLEGE

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The purpose of this paper is to present: (a) a brief history of the reading laboratory at Universidade Federal de Santa Catarina (UFSC); (b) a description of the work carried out in the reading laboratory; and (c) a summary of the results of the research project.

Through my experience as a teacher of English as a foreign language (EFL) at UFSC since 1975, and through discussions with fellow teachers not only in the foreign languages department but also in the department of Portuguese (Língua e Literatura Vernáculas), I have observed over the years that poor reading skills and poor study skills are a serious drawback in the total academic achievement of our students in the college of Letters. Efficient college work demands reading skills such as inference, interpretation, and critical evaluation of the texts read. It also demands effective study skills such as previewing a text, notetaking, outlining, summarizing, mapping, etc... and above all, the capacity to plan and organize one's academic work in a rational way. However, the fact is that many of our students cannot comprehend beyond the literal level, i.e., they are unable to get meaning that is not explicitly stated in a text, and study techniques are completely unknown to most of these students.

Our concern about students' lack of appropriate reading and study skills becomes even deeper when we are confronted

with the fact that these students are prospective teachers. Most of them will become teachers of Portuguese and/or of a foreign language at elementary and/or secondary schools. It seems that some of the important responsibilities of language teachers (particularly of the mother tongue) on elementary and secondary levels should be to develop in their students: (a) effective reading skills; (b) good reading habits; (c) a positive attitude towards reading; and (d) an awareness of the importance of reading. But the truth is that the curriculum of the college of Letters at UFSC does not include any specific course or training in the teaching of reading. Therefore, students who graduate from the college of Letters are inadequately prepared for the task they will later undertake as teachers in elementary or secondary schools. In turn, students who graduate from high school are unprepared for college academic work, and usually become frustrated during the first semesters of college when they feel they cannot cope with the work required. Some even drop out of college.

So it seems that we are facing a circular problem, and in order to arrive at a solution to the problem the circle will have to be broken at one end or the other. The way we saw as a beginning in this direction was through implementing a reading laboratory at UFSC, where those college students with reading and study problems could obtain help in order to improve their reading and studying.

The idea of this project originated during my graduate studies at the University of Iowa, USA, where, through my course work and practicum I became acquainted with the reading laboratory and its procedures. But the project only took shape when I returned to my work at UFSC in 1985 and started to teach reading and writing to 3rd and 4th semester EFL students. At that time it seemed to me that it would be difficult or perhaps impossible to develop reading skills in the foreign language of students who, apparently had not yet mastered these skills in their native language. So I discussed my ideas with a colleague of the department of Portuguese who had also had some experience with reading laboratories in the USA, and we agreed to make a proposal to both the foreign languages and the Portuguese departments for implementing a reading laboratory, which could benefit students of both departments. Our proposal was approved by both departments and the project was granted a fund from FINEP (Financiadora de Estudos e Projetos) over a two-year period. Thus, the pilot project started in March, 1987 and ended in March 1989. The continuity of the project at this time depends on a new grant of funds or the definite incorporation by UFSC of the reading laboratory as a permanent service to the student community.

The reading laboratory has been used successfully at various American universities as a means of improving the reading and study skills of native American and foreign students since the 1930's (Nist and Hynd, 1985). It consists basically of a room containing a large variety of printed materials to suit a variety of remedial and developmental



reading needs. It contains materials such as novels, newspapers, magazines, encyclopedias, dictionaries, atlases, globes, maps, books with different levels of difficulty on subjects such as philosophy, psychology, history, geography, sciences, and other content areas. The idea of reading laboratories hinges strongly on Smith's (1978) idea that a person only becomes a proficient reader through reading. In other words, the more a person reads, the better reader he becomes. By being exposed to a wide variety of reading materials a student develops not only content schemata but also schemata for different types of text structure, and an ever more sophisticated vocabulary, and this is what makes a good reader.

In addition to the printed materials, some reading laboratories have also adopted computers, 'readers', pacers, and other mechanical devices to help students improve their reading rate. However, in recent years the effectiveness of most of these machines has come to be questioned, and the tendency has been towards investing more in staffing the reading laboratory with qualified instructors attuned to providing direct instruction to individual students (Nist and Hind, 1985). Most reading researchers agree that before working on speed of reading a student must develop good comprehension.

The reading laboratory is intended to develop students' reading and study skills, i.e., to prepare students for reading, analyzing, synthesizing, and evaluating texts, as well as to teach them learning strategies needed in college courses.

One great advantage of the reading laboratory is that it provides individualized instruction. The student has the opportunity to learn and practice in a non-threatening environment. He learns and practices at his own pace. Yet at the same time, the reading laboratory also offers opportunities for group work. For example, if there are two or more students with common reading problems, they may work together if they wish. Thus, in the reading laboratory the reading teachers have the opportunity and means to create learning situations that meet the needs and cognitive styles of individual students.

In most college reading laboratories, students who wish to obtain help in their reading problems are first submitted to an informal interview and a battery of reading tests in order to diagnose their strengths and weaknesses. As a second step, individual study plans are prescribed according to the problems detected. Finally, under the guidance of a qualified reading teacher, students work through a series of materials and activities in the reading lab, either on a tutorial or a group basis.

At some American universities the reading lab approach is used in conjunction with an actual reading course, and this is approximately the type of reading laboratory that has been organized at UFSC. This laboratory has been planned to serve, first of all the students enrolled in the college of Letters.

One of the long term goals of this project is the improvement of reading at college, secondary, and elementary levels. As an attempt to achieve this goal we set four main objectives.

First, to improve reading and study skills of students of the college of Letters (beginning with majors of Portuguese and majors of English). This objective we are trying to accomplish through remedial reading work in the reading laboratory.

Second, to provide theoretical and practical background in reading to prospective teachers of Portuguese and/or English in elementary and secondary schools, which we are trying to reach through an optional reading course and remedial work in the reading lab. We believe that it is not enough to attack these students' own reading problems through remedial work. It is also important that future language teachers be prepared to teach reading and to develop the pleasure of reading in their students. Furthermore as Smith (1978) points out, in order to be able to choose the right approach for teaching reading in the right situation teachers must understand the nature of the reading process and what it means to learn to read. It is expected that through the improvement of teacher preparation, reading development in elementary and secondary schools will improve, too, and that, as a long-term result, students graduating from high school will be better equipped for the work they are going to face in college. Of course, none of this will happen in the near future. It will probably require years of persistent work.

Third, to provide graduate students of: (a) Brazilian Literature; (b) English and (c) Linguistics with theoretical and practical background in the teaching of reading as well as acquaint these students with some research in the area of reading. In order to reach this objective we are offering a reading course on the graduate level and a practicum of at least one semester in the reading laboratory. Students attendance of the reading course is a prerequisite for the practicum in the reading laboratory. The reading course in English is offered by the English graduate program once a year, and in Portuguese occasionally. The practicum in the reading lab consists mostly of helping undergraduate students with their reading problems.

Finally, objective four is to provide elementary and secondary language teachers (already active in the schools) with general knowledge about the teaching and improving of reading. This we expect to accomplish through short courses that we will offer to these teachers at regular meetings once or twice a year. Our first meeting of this kind took place in July, 1988. It was offered to 1st through 4th grade teachers of Portuguese. Approximately 70 teachers from several different local public schools participated in this first meeting.

Another long-term goal of the project is to further investigate reading as an interactive process (Rumelhart,

1977) with both L1 and L2 readers. To achieve this goal all data referring to students' pre and post tests, achievement tests, teacher observations of student's behavior, and interviews with students are being stored for later analysis, description, and interpretation. Part of the results of the data obtained during the two years of the pilot project has already been analysed, and a summary of the findings will be presented later in this paper. The data that have been collected offer opportunities for graduate students who are interested in the area of reading, to develop topics for their theses. In fact, three graduate students who took their practica in the reading lab, have already found inspiration for their masters theses during their work in the reading laboratory.

A student's lack of appropriate reading skills in the mother tongue seems to affect many areas of learning. In this paper we are particularly interested in discussing how it may interfere with the learning of reading in a foreign language.

In the last fifteen years researchers have argued considerably over the question whether the difficulties in reading in a foreign language are a reading problem or a language problem. Jolly (1978) and Coady (1979), for example share the view that a student's success or failure in reading in a foreign language depend 'crucially' on his first language reading ability. They assume that a foreign language learner will automatically transfer his first language reading skills to reading in the foreign language. Clarke (1979) and Yorio (1972) take an opposite view. They assert that reading problems of foreign language learners are due to lack of competence in the foreign language. To Clarke (1979) there is a 'threshold' level of foreign language competence in the foreign language, i.e., a minimum level of proficiency in the foreign language required before a student can be asked to read in the foreign language.

Alderson (1984) reviewed a series of studies dealing with the question whether reading in L2 is a reading or a language problem and discussed various hypotheses with regard to this question. He concluded that it probably is both, but that for students of low language competence there seems to be stronger evidence in favor of a language problem.

One could argue that if the reading process is universal, as Goodman (1971) suggests, then the reading strategies needed to approach a text in a second/foreign language should be the same as those used for reading in the native language. By the same token, reading skills acquired for reading in the native language should naturally transfer to reading in the second or foreign language, provided that both languages use the same symbol system. Yet, there have only been a few attempts to study the process of reading in language2 (Hosenfeld, 1977; Yorio, 1972; Devine, 1984; Block, 1986), and the findings of these studies have not consistently shown whether language2 readers actually go through the same process as language1 readers do while



reading a text. Some researchers (Hosenfeld, 1977; Block, 1986) have observed similarities between language2 and language1 readers with regard to strategies used to approach texts, yet more research is needed in this area in order to establish the real similarities and differences between the two types of reading, so that conclusions can be drawn from the findings as to how pedagogical practices with regard to reading in a foreign language can be improved.

For one thing, reading is a complex process for the native language reader and probably more so for the foreign language reader. To use Phillips' (1984) words, "reading depends on a combination of linguistic knowledge, cognitive skill, and general experience and knowledge of the world," p. 285. According to the psycholinguistic view, reading is a "psycholinguistic guessing game" (Goodman, 1970) in which the reader is constantly choosing the most efficient language cues to "construct the message of a text. It is a sampling and predicting process. The foreign language learner, who is still in the course of developing his competence in the foreign language, probably cannot perform the sampling and predicting process of language cues as efficiently as the native reader.

In spite of the lack of clear research evidence as to whether language1 reading skills are transferred to reading in language2, common sense suggests that the existence of successful or unsuccessful reading strategies in the mother tongue has an influence on reading in the second or foreign language. Based on this assumption we decided that our first step should be to work on students' reading problems in the mother tongue. So, during the first semester our work in the reading lab was centered on helping students with difficulties in reading Portuguese texts. It seemed to us that some of the problems students encounter when trying to read in the foreign language could be prevented for if they were taught good reading strategies in their mother tongue. During the second semester however, this help was also extended to students of EFL.

The reading assistance offered to students by the reading laboratory at UFSC consists of three basic stages (1) a battery of reading comprehension and vocabulary recognition tests and a questionnaire on reading and study habits are administered to each student who seeks help at the reading laboratory; (2) the results of the tests and the answers to the questionnaire are analyzed in order to find out the student's specific difficulties; and (3) a series of specific remedial activities are developed accordingly and suggested to the student. The student then signs up for 3 hours a week - usually divided in 2 or 3 sessions - to work on his problems. Students are gradually helped to learn such skills as anticipating information, inferencing meanings, analyzing and synthesizing information, etc..., and above all, they are helped to become aware of their own reading operations and what they need to do in order to improve their reading competence, in other words, to monitor their reading process. Whether dealing with reading in

language1 or in language2, the more students are exposed to reading, the more linguistic control they will develop. Furthermore, they develop more useful cognitive strategies and acquire a broader range of experiences which they can draw upon in subsequent reading tasks.

In addition to the individual assistance in the reading laboratory, Portuguese majors and English majors have the option of taking a regular course in reading which has been incorporated in the curriculum of Letters. This course provides students with basic theoretical background on the process of reading, but the emphasis of the course is on practice of reading and study skills.

During the 3 semesters we have interviewed 105 students, but only 85 received regular assistance in the reading laboratory. Some students took the tests and interviews and then never returned to the lab, not even to pick up the results of the tests. Others did not finish their tests, and still others signed up, came to a few sessions, and then disappeared. This inconsistency on the part of the students obviously made our work at the lab very difficult and ineffective at the beginning, yet we knew that such type of behavior was to be expected. Many students see the reading laboratory as something 'miraculous', a place where they expect to find an answer to all their problems in school, and once they learn that they themselves will have to work hard in order to overcome their reading difficulties, they give up. Thus, we lost 20 students for one or another of the reasons mentioned above.

Of those 105 students, 65 were enrolled in the course of Letters (45 Portuguese majors and 20 English majors), and 25 came from other areas than Letters. As pointed out before, this reading laboratory was planned to serve students enrolled in the college of Letters in the first place, but after we announced the opening of the lab, we received requests for help in reading of students from various other areas. Such as social sciences, psychology, pedagogy, history, library science, journalism, business, biology, physics, physical education, chemical engineering, electrical engineering, mechanical engineering, etc...

The results of the analysis of the data indicate that the majority of Portuguese majors had a very poor reading vocabulary, had serious difficulty in concentrating on reading, in locating the important information in a text, in making inferences, and in recalling information from text; and that many of these students had a very low reading rate, considering that the average reading rate in the native language is estimated in 250-300 words per minute (Pauk, 1984). Most of these students read at a rate of 50-70 words per minute.

As to the results of the analysis of the data regarding the students who are English majors, the findings also indicate that in general students have serious deficiencies in reading, study habits, and reading skills. A large percentage of these students have difficulty in distinguishing main ideas from secondary ideas and details,



making inferences, recalling information. However, the areas in which the majority of these students needed the most help were speed of reading (their reading rate ranged between 25-40 words per minute) and vocabulary development. The same students that had very poor vocabulary also showed serious difficulties in general comprehension of texts. This last finding is consistent with the literature on reading comprehension which suggests that there is a close relationship between reading comprehension and vocabulary knowledge. A student with a poor vocabulary will also be a poor reader (Anderson and Freebody, 1981; Freebody and Anderson, 1982). On the other hand, a person with a good active and passive vocabulary, will comprehend well, for it is exactly his rich vocabulary that makes him a good reader, and because he is a good reader, his vocabulary tends to improve more and more.

As we can see, the overall picture that emerges from the analysis of these first data certainly is not very encouraging. Much remains to be done to improve reading, particularly reading as a vehicle of learning, both in our secondary schools and in college. Apparently very few of these students were actually prepared to undertake the academic work expected from them in college. The ability to read well is essential for success in college. Text-books are the major source of study in most classes. Effective study habits are also essential for success in college, but the expectations of most students that enter college do not correspond to the reality of the academic work they will face at college. One of the reasons for this probably is the little (or, in some cases, total absence of) guidance and encouragement at elementary and secondary schools towards reading and studying conducive to effective learning. It would be very helpful if part of the time used in secondary schools for teaching students "tricks" to pass college entrance examinations, were used to prepare them for academic life in college. But before this can happen, it is essential that prospective teachers for elementary and secondary schools, especially language teachers, be adequately prepared in the methodology of teaching reading.

College teachers of different areas vary in their opinions with regard to students who enter college unprepared for college study. Some think that these students must make an effort to work their way up, and if they don't succeed, they should drop college because they are therefore considered unfit for college. Others are of the opinion that such students should be helped to overcome their difficulties through remedial work offered at the university, along with their regular class work. This was the idea that led to the reading and writing labs and other types of assistance at American universities, and this is also the idea in which the group of teachers involved in this project believe. We are optimistic because we have learned through the feedback we obtained from students that the assistance they received in the reading lab has really made a difference in their lives as students in the sense



that they were able to overcome their difficulties of learning by developing habits and attitudes that lead to effective study. Finally, we believe that, while our elementary and secondary schools do not undertake the responsibility to prepare students for college in a holistic way, services like the reading laboratory and other types of assistance should be offered at all universities, and we strongly hope that the results of this preliminary investigation of the reading skills and study habits of students at UFSC should sensitize and convince our administrators that the reading laboratory should be definitely incorporated into the university as a permanent service to be offered to students that need help with reading.

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