

**Attitudes and habits of high school Brazilian students
in relation to everyday information**

Raquel Roberta Bertoldo
Universidade Estadual do Oeste do Paraná
raquel.bertoldo@gmail.com

Marcia Borin da Cunha
Universidade Estadual do Oeste do Paraná
marcia.borin@uol.com.br

Olga Maria Ritter Peres
Universidade Estadual do Oeste do Paraná
olga.unioeste@gmail.com

Angela Camila Pinto Duncke
Universidade Federal do Rio de Janeiro
angeladuncke@hotmail.com

Marcelo Giordan
Universidade de São Paulo
giordan@usp.br

Abstract

The opinion surveys with high school students are important because they can help professionals to develop teaching strategies that meet the needs and weaknesses of students. The survey on perceptions of Science and Technology with Brazilian high school students was held in the years 2010 and 2011 in five regions of Brazil. Data from

this study were collected in two stages: first through an opinion questionnaire (quantitative method) and secondly through an interview (focus group technique). Throughout the Brazilian territory 20 schools were surveyed, the questionnaire was answered by 1034 students and about 350 students participated in the focus group. In this paper we are reporting data related to students' behavior in relation to information available in leaflets, packages, manuals and/or other guidelines. In general we can see that most young people do not have reading as a habit, especially when the information in question is contained in the labels and manuals.

Introduction

In a society marked by advances in media and with short and fast information being released all the time, the habit of reading is getting lost. Reading is also a cultural issue, and in Brazil, the reading habit is not a common habit among the population. In schools the task of developing reading activities with students is mostly attributed to the Portuguese language teacher. However, reading, as well as its interpretation is an important tool in all areas of knowledge, including the role of the individual in their daily activities.

Silva (1995) points out that reading should not be attributed only to an area and that promoting reading is the responsibility of the entire school staff. He also comments that we talk about interdisciplinarity, but do not put into practice these educational schemes.

This paper aimed at analyzing the reading habit of students facing the information available in their daily lives related to Science and Technology. It is noteworthy the importance of being aware about facts related to scientific knowledge presented day by day. Chassot and colleagues (2005) carried out a research to assess confusing information in food package labels. This kind of analysis and discussion is relevant so that people become aware about what they are consuming and how to use a certain product appropriately.

According to Monteiro, Recine and Coutinho (2005), product labeling or other source of information is part of an educational process, due to the fact that the purpose of education is to change the human condition of the individual who acquires knowledge. In

education it is important that the knowledge acquired will make sense to the student and that it is inserted in their sociocultural environment in order to improve the conditions and quality of life.

In this context, we analyzed in this paper, which is part of a larger research, the frequency or habits that students have on reading information present in their daily lives, such as those that are in the instruction manuals, leaflets of medicines, food packaging etc.

Methodology

In the years 2010 and 2011 we conducted a survey on perceptions of Science and Technology with Brazilian high school students. The method used to define the sample was cluster sampling, in which the population is divided into different groups, called clusters, extracting a part of them. In order to trace indicators that best represent the country, we conducted our research in five Brazilian regions: Midwest, Northeast, North, Southeast and South. In each region a capital and a country city were chosen. Data collection was performed by means of qualitative and quantitative methods. The tools for data collection were a questionnaire and an opinion survey through focus group technique. In total there were 20 schools and 1034 students completed the questionnaire, and of these about 350 students participated in the focus group.

Data from the questionnaire were analyzed using SPSS statistical means (Statistical Package for Social Sciences software) version 11.0. The focus group interviews were recorded using a digital recording and later transcribed, using some codes for the transcription, as follows: **S** is the speech of students, **P** for the researcher, (+) represent pauses in speech /.../ removal of parts.

Results and discussion

One of the aims of this research was to analyze the students' behavior regarding information available in medicine leaflets, packages, manuals or general orientations.

The following tables from 01 to 05 present the results regarding the responses provided by students, considering the 5 regions. Table 1 shows the percentage of students in relation to the habit of reading leaflets of medicines.

Table 01: Do you read medicine leaflets?

	Midwest	Northeast	North	Southeast	South
Yes, usually	28.4	31.6	33.0	23.1	21.1
Yes, sometimes	50.2	50.6	51.4	47.2	47.7
No, never	21.4	17.8	15.6	29.7	31.2

*results expressed in percentage

Source: author (2012).

In table 1 we can see that the Brazilian students, in general, do not usually read the leaflets of medicines. Students from the Southern regions have similar behavior, read less leaflets of medicines (21.1% and 23.1%, respectively) than when compared to students from the North (33.0%), Northeast (31.6 %) and Midwest (28.4%).

Table 2 shows the percentages of student responses regarding the reading of information provided on food packages.

Table 021: Do you read information on food package labels?

	Midwest	Northeast	North	Southeast	South
Yes, usually	31.2	37.0	34.1	33.5	36.7
Yes, sometimes	61.4	52.6	50.3	54.6	54.1
No, never	7.4	10.4	15.6	11.9	9.2

*results expressed in percentage

Source: author (2012).

Most students chose to tick the "yes, sometimes" option, showing that frequent reading of food labels is not a part of the everyday practice of students. However, during the discussion in the focus group students weave some comments regarding information provided on food labels. The major concern of students is centered on the issue of genetically modified foods and the little information provided on labels.

The excerpts of transcripts 1 and 2 present comments regarding GM foods and the lack of information on labels.

Transcript 1:

S: people are a little afraid of using GM (+)

R: Do people have this worry?

S: I have (+)

R: we are consuming (+) you don't know what is GM or not (+)

/.../

R: Do you read information before you buy the product?

S: There are some that don't even have (+)

/.../

R: you don't know anymore which one is GM and which isn't (+)

S: you get the one which appeals more to you (+)

/.../

S: I saw a list on Green Peace site (+) of some companies which use GM (+)

(Brasilia School – Federal District)

Transcript 2:

S: but, there is food that is altered (+) there are some that are really big, aren't they? /.../

S: the GM

S: /.../ there are many researchers who change (+) and produce what are GM (hypotheses) but (+) they do not warn you (+) for example (+) there is oil (+) there is olive oil (+) there is tomato (+) that have a huge part there warning that is GM and do not know

(Porto Velho School – RO)

Later, the students were asked how often they check the technical specifications or manuals for appliances, as can be seen in Table 03:

Table 03: Do you check technical specifications or manuals?

	Midwest	Northeast	North	Southeast	South
Yes, usually	24.5	31.1	26.8	22.8	23.3
Yes, sometimes	58.0	45.5	47.5	52.6	50.2
No, never	17.5	23.4	25.7	24.6	26.5

*results expressed in percentage

Source: author (2012).

In general, young people surveyed have no habit of checking technical specifications or manuals for appliances. The northeast region has the highest percentage (31.1%), even so, we can consider a low value because there is not even a third of the young population of the region.

Regarding the following of "medical guidance treatments or diets", we realize that most young people have this habit, as can be seen in Table 04:

Table 04: Do you follow medical guidance when undergoing a treatment/diet?

	Midwest	Northeast	North	Southeast	South
Yes, usually	51.2	53.0	44.4	56.8	63.3
Yes, sometimes	29.7	29.2	34.8	27.0	20.1
No, never	19.1	17.9	20.8	16.2	16.4

*results expressed in percentage

Source: author (2012).

Apart from the Northern region (44%), other regions showed an index higher than 50% of students who follow medical guidance to treatments or diets. The results in Table 04 can be compared with data from table 01 in which the student was asked if he had the habit of reading leaflets of medicines. Given the comparison we infer that students rely heavily on the doctor, as it is not a frequent habit to read leaflets of medicines, but follow the treatment the doctor suggests.

To sum up the issues that deal with means of information present in the daily lives of students, the students were asked to express their opinion on the concern for information in case of an epidemic. In table 05 we present the percentages obtained.

Table 05: Do you remain informed during and epidemic?

	Midwest	Northeast	North	Southeast	South
Yes, usually	62.5	59.9	65.5	60.4	57.7
Yes, sometimes	33.2	34.7	29.8	31.1	39.0
No, never	4.3	5.4	4.7	8.6	3.3

*results expressed in percentage

Source: author (2012).

When it comes to an epidemic most Brazilians remain informed. Note that the media constantly brings news about epidemics and, as television and the internet are the biggest sources of information, it is to be expected that the percentage of students who are aware is high.

Final considerations

In our daily lives we are surrounded by all kinds of information and many of them get to be so commonplace that we do not give the due importance. This occurs with information provided on food labels, pharmaceutical leaflets, manuals of equipment or others. However these are pieces of information that enables decision making by this or that product, or a more sustainable and conscious consumption, for example. Moreover, much of the information provided on labels and leaflets are not always understood by all parties or sometimes are confusing and misleading and in this sense the school can contribute to a better explanation of this knowledge. Thus the informality of a piece of information becomes a tool for contextualization of science education, bringing for the school the social function of its teaching.

Regarding the results presented in our study, we observed that, in general, students do not usually read leaflets of medicines or information provided on food packaging. It is noteworthy that are influenced by the environment in which they live,

because they follow guidance and diets proposed by health professionals and believe in information on the Internet about the origin of their food. Regarding the degree of information concerning epidemics, it appears that most students surveyed remain informed about the risks and proper procedures on the same, which is a positive point.

Thus, our research showed some data that may be considered by science teachers to explore new strategies that focus on fostering in students the habit of critical reading of labels, leaflets, manuals and other, given that this habit seems to be overlooked by most students, and that not only it is a practical function in their lives, but also a function of understanding the integrated science to everyday life of the individual.

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