

## Reading and writing practices across the curriculum in Portuguese schools: a survey with teachers and students.

---

José Brandão Carvalho, M. Lourdes Dionísio, M. Helena Martinho, M. Céu Melo, A.C. Silva, F. Viseu  
*University of Minho, Portugal*

### 1. READING AND WRITING IN THE CURRICULUM: SPECIALIZED PRACTICES

Reading and writing skills need to be continuously and specifically enhanced in each content area (Garbe, Gross, Holle & Weinhold, 2009:5). On one hand, we assume that reading and writing are very complex tasks that must be intentionally and systematically developed at all school levels in the context of the different subjects; on the other hand, we must take into account that academic performance depends not only on content knowledge but also on being able to understand and produce the texts that convey such contents.

These positions are based on the recognition of the following: i) learning school subject matter is above all a matter of language, understood “not [as] a domain of human knowledge [but] as the essential condition of knowing, the process by which experience becomes knowledge” (Halliday, *cit. In* Gavelek, Raphael, Biondo & Wang, 2000:603); ii) each content area has a specific language and specific texts and also specialised ways of performing reading and writing tasks (Gee, 2000; 2004).

Studies focusing on the identification of the distinctive (and structural) features of textual genres used in different subjects, such as Mathematics, Science and History, have strengthened knowledge about the specialization of content area literacies. As Moje *et al.*(2004:38) say, “...literacy is a complex construct and [...] secondary content area literacy learning and its use are particularly complex [...] students meet different disciplinary knowledge, discourses, and texts throughout a single day in a secondary school [which] requires sophisticated uses of language and literacy by teachers and students as they explore upper level content concepts such as science, history, literature, and mathematics”.

In Portugal, these positions on the specificity of the reading and writing for learning in the different content areas are expressed in the official pedagogic discourse, particularly in the syllabi of the different disciplines in which we can find several references to the importance of developing specific reading and writing practices in order to enhance learning (Ministério da Educação, 2001; 2007).

### 2. READING AND WRITING TO LEARN- A SURVEY

Based on the assumptions expressed above, the Research Group *Literacies – Practices and Discourses in Educational Contexts* of the University of Minho (Portugal) is developing a study that aims to identify and describe reading and writing practices within different content areas. More specifically, the aims of this study are: i) to identify reading and writing practices in the different content areas, inside and beyond the classroom, as well as the textual genres used, while trying to relate these uses to the contexts in which they take place; ii) to identify the aims of those practices, their role

in the learning process as well as the social meaning of such uses of language; iii) to characterise reading and writing modalities, their organisation, the people involved (students/teachers/parents) and media used; iv) to relate those literacy practices to students' performance and the results in terms of learning achievement.

In this paper, we present only the part of the study that consisted of a survey involving 105 teachers from different school levels (level two [grades 5 and 6] and level 3 [grades 7, 8 and 9]) and content areas (Physics and Chemistry, Mathematics, Natural Sciences, History, Geography, Portuguese, English and French). Data were collected in two lower-secondary schools in Braga, a city in the north of Portugal. The questionnaire focussed on different aspects: the contexts and the aims of reading and writing activities; the learning tasks involving such activities and the textual genres used; the organisation of the activities concerning students' work in the classroom. Since we wanted to detect the presence or the absence of facts, most questions had a four level frequency scale (Never/Rarely/Frequently/Always).

### 3. DATA ANALYSIS

#### 3.1 SITUATIONS AND AIMS OF READING AND WRITING IN THE CLASSROOM

In this section, we present data about different situations concerning the teaching/learning process: *a) activating previous knowledge, b) exploring knowledge, c) applying knowledge d) synthesizing knowledge, e) evaluation*. It was assumed that all these situations may imply the interaction with texts and through texts.

As far as reading is concerned, the data obtained allow us to confirm its mediating role in the access to disciplinary knowledge. As we can see in Chart 1, teachers say that reading activities are frequent in all learning situations suggested.

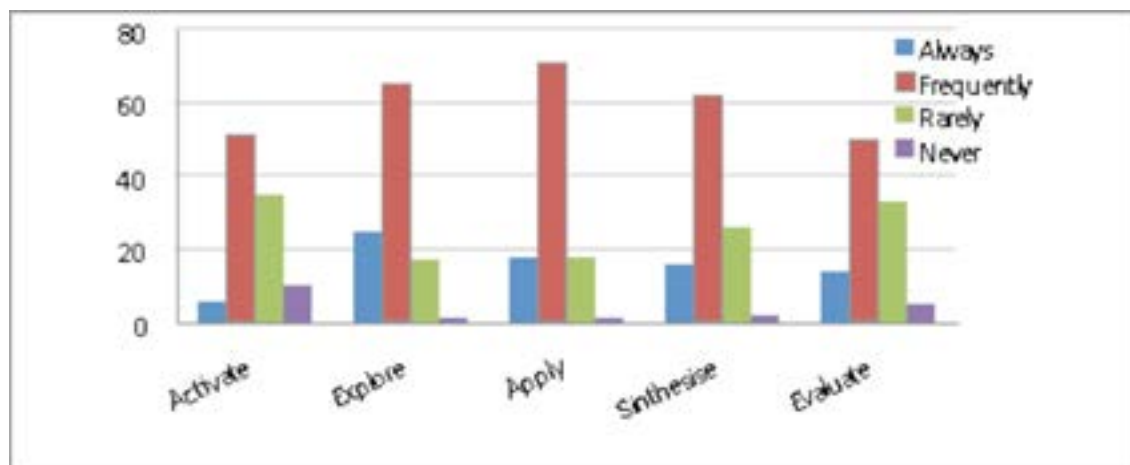


Chart 1 – Learning situations involving reading in the classroom

Reading to activate knowledge is, nevertheless, referred as rare by many teachers. The dialogue between teachers and students is traditionally the way to achieve such objective in classroom. Anyway, it is clear that a student-centred pedagogy would use reading and writing to involve student' previous knowledge when introducing

new contents, for example, by asking students to list what they know about it. The conflict between students' previous ideas and new knowledge may generate learning enhancing conflicts. Nevertheless, this does not mean that the teacher does not mediate these activities that involve the use of texts; it is important to assure that those reading and writing activities do promote the cognitive conflicts that generate desirable changes. (Thuraisingam, 2001; Melo, 2009)

Besides identifying the learning situations that involve reading, it was also important to know how frequently students carry out different reading processes such as *looking for information*, *summarising* or *analysing*. Generally, all these operations are referred as frequent (Chart 2), but if we consider what happens within different content areas, we can find some variation according to the disciplines: *rarely* and *never* are more frequent among Sciences, Physics/Chemistry, and Mathematics teachers than among the teachers of others disciplines.

The relevance of inquiring about these reading purposes and processes arises from the knowledge we have about the problems that Portuguese students reveal when they have to select and retrieve information from texts (Ramalho, 2001). These processes are very important both for learning school subject matter and for knowledge acquisition in general.

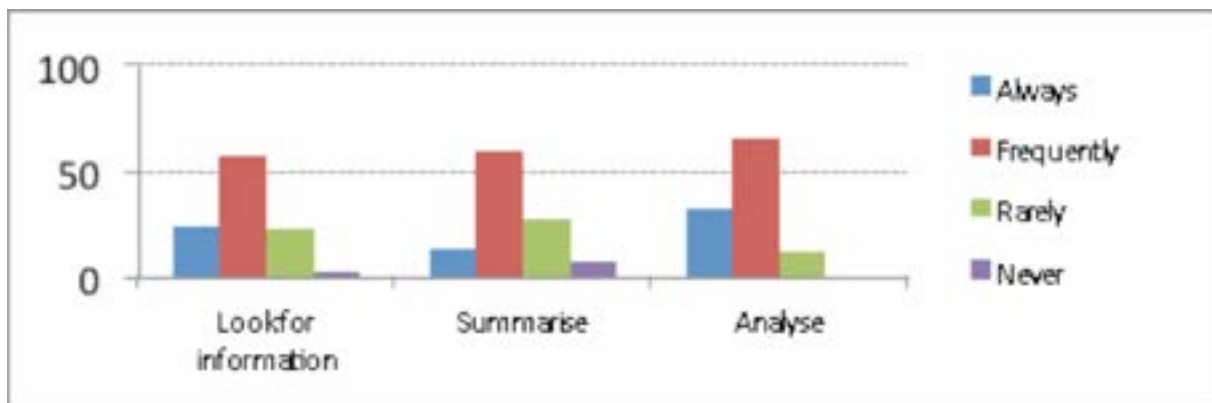


Chart 2 – Purposes of reading

When asked about the involvement of writing in different learning situations, teachers say it is frequent in most of them, except for *activating previous knowledge* (Chart 3). As stated above, in the classroom, this objective is mainly achieved through a dialogue between teacher and students. On the other hand, knowledge application seems to be the situation that more frequently involves writing.

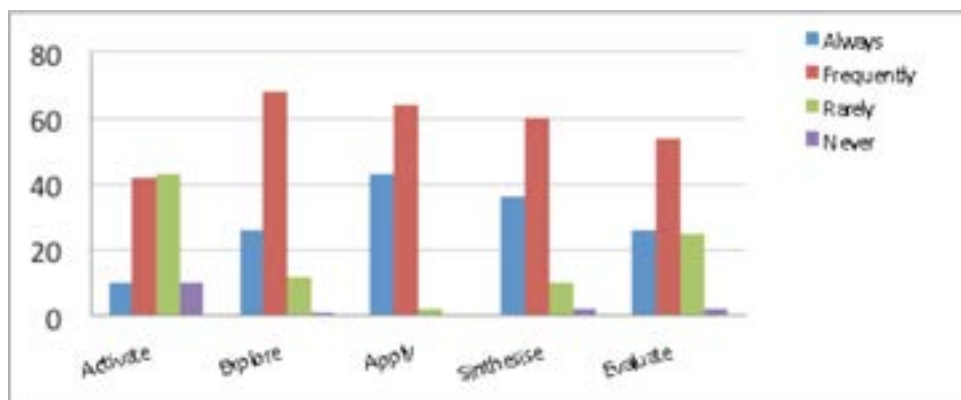


Chart 3 – Learning situations involving writing

### 3.2 WHAT IS READ AND WRITTEN IN CLASSROOM

#### 3.2.1 Reading materials

Assuming that both meaningful learning and the development of reading skills depend on the opportunities to interact with different kinds of texts, taking into account their structures and social functions, we asked teachers about the textual genres used in their lessons. As Chart 4 demonstrates, the *textbook* is the most frequently used material. In fact, the majority of the respondents say that the *textbook* is something that students always read.

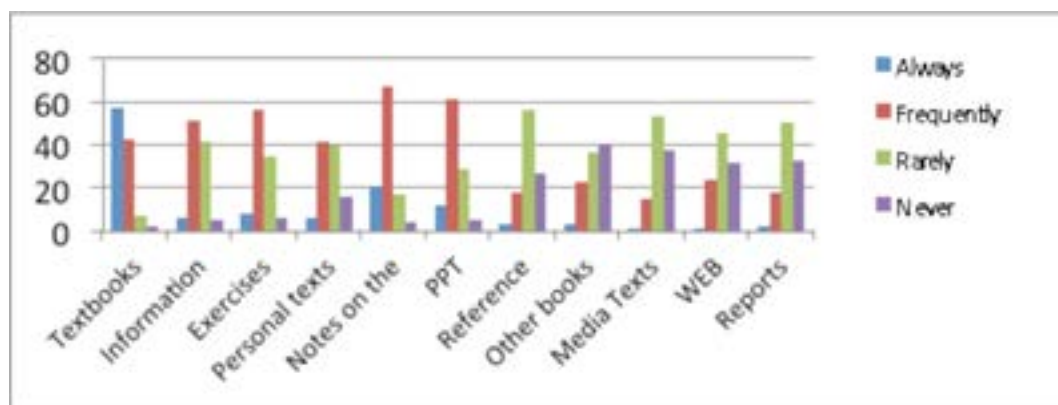


Chart 4 – Materials read in the classroom

The predominance of the *textbook* as the object of reading activities in the classroom confirms widely shared perceptions about reading at school. This is also confirmed by the results of other studies (Dionísio, 2000; Viseu, Fernandes & Gonçalves, 2009) that show that, despite all the innovations in the educational field, the *textbook* is still the main (and almost unique) textual resource used by students to access knowledge.

Other materials, that we may consider as traditional, are also said to be frequently used: *records on the board*, *overheads/PPT*, *information sheets* and *exercises*. On the other hand, other texts such as *reference books*, *other books*, texts of the *media* and the *web*, which we might expect to be widespread nowadays, are *rarely or never* used by many teachers. Taking into account the traditional nature of the texts students

read more frequently, we can infer the prevalence of a reductionist perspective of pedagogic activity. In fact, students are not given many situations in which they have to deal with the multiplicity of texts and with the possibility of developing the literacy skills that are involved in their production, consumption and transformation.

The predominance of such a reductionist perspective is also evident when we analyse the use of the different materials included in *textbooks*. Since *textbooks* are not homogeneous texts and include different compositional structures, styles and communicative goals, it was also important to know what is read within the textbook. According to the teachers, in the *textbook*, students read mainly *content explanations*, *examples* and the *exercises* they are supposed to do. Other genres, such as reference texts, which are also included in *textbooks*, are not frequently read. This also means a reductive use of the *textbook* through the selection from the materials it contains. Those texts that might have more potential in terms of the development of reading and learning skills are rarely used or even ignored.

### 3.2.2 – What is written in the classroom

Asked about what students write in the classroom, teachers refer to the *summary*, the *copying of what is written on the board or projected* as well as *exercises* and *tests* as the more frequent written products (Chart 5).

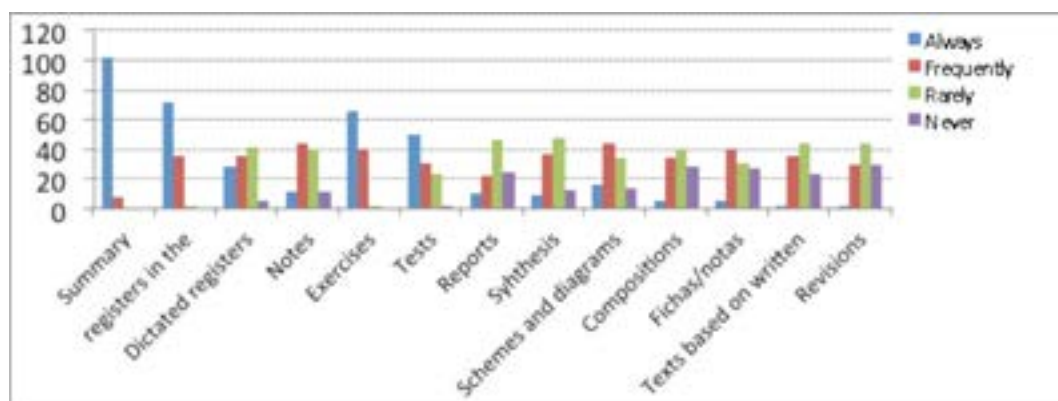


Chart 5 – What is written in the classroom

Real text production seems to be absent from the classroom. From the teachers' answers, we infer that those writing activities that imply the students' autonomous authorship and their involvement in knowledge elaboration are few. Among those activities we can include note-taking, report construction, the synthesis of information retrieved from different sources, the construction of schemes and diagrams, as all these demand the engagement of students in learning. Instead, what the teachers reveal in the questionnaire is a set of routine activities that favour a passive attitude of the students in knowledge acquisition processes.

## CONCLUSION

Although the data reveal the existence of reading and writing activities in all content areas, they also reveal that reading and writing practices reported in different content areas do not favour students' engagement, something that constitutes a determinant factor of meaningful learning. This meaningful learning tends to happen in authentic contexts in which students perform multiple reading and social roles, what implies their participation in diverse cultural practices in which texts play an important role. Their fluency in literacy practices depends on the opportunities to read and write the variety of texts that exist in society.

If we consider the reading and writing activities that seem to be more frequent in the classroom, their functions as well as the textual resources involved, we can conclude that texts are mainly used in tasks of knowledge expression and application. In this context, students play mainly the role of consumers, rather than constructors and producers of their own learning. In the same perspective, reading and writing do not appear in Portuguese schools as a means of approaching new content or regulating the learning processes.

Generally there seems to be no recognition of the relationship between reading, writing and learning and, apparently, the inclusion of reading and writing activities in lesson plans does not seem to be intentional in most cases. The low range of textual genres, the exclusion of those that have more potential for learning development, the low frequency of those activities, such as research, selection, organization and critical application of information and knowledge, do not favour the development of literacy skills and the emergence of a critical attitude towards the multiplicity of texts students have to deal in their own world.

There may be different causes to explain this situation. Among them, the teacher-training processes that do not demonstrate the relationship between reading, writing and learning nor the importance of including authentic texts in lesson planning.

This shows the necessity of developing pre and in-service teacher-training programs that focus on these issues, as it is already happening in many European countries, where this is being considered a priority. The aim of these programs, that should involve teachers from all disciplines, is to provide knowledge about reading and writing in the content areas and make teachers draw on new didactic resources. In such programs teachers must become aware of the benefits of using authentic materials in the classroom as a way of involving students in real literacy events. This use of authentic materials may be highly motivating, giving a sense of achievement when understood and encouraging further reading.

## REFERENCES

- Dionísio, M. L. (2000). A construção escolar de comunidades de leitores. Leitura do livro de Português. Coimbra: Almedina.
- Garbe, C., Gross, M., Holle, K. & Weinhold, S. (2009). *ADORE-Project. Teaching adolescent struggling readers. A comparative study of good practices in European Countries – Executive Summary*.  
[http://www.alinet.eu/index.php?option=com\\_content&view=article&id=28&Itemid=34](http://www.alinet.eu/index.php?option=com_content&view=article&id=28&Itemid=34).
- Gavelek, J., Raphael, T., Biondo, S. & Wang, D. (2000). Integrated literacy instruction. In M. Kamil, P. Mosenthal, P. D. Pearson & R. Barr (Eds), *Handbook of Reading Research*. Volume III (pp. 587–607). Mahwah, NJ: Erlbaum.
- Gee, J. P. (2000). Discourse and sociocultural studies in reading. *Reading Online*, 4(3),  
[http://www.readingonline.org/articles/art\\_index.asp?HREF=/articles/handbook/gee/index.html](http://www.readingonline.org/articles/art_index.asp?HREF=/articles/handbook/gee/index.html).
- Gee, J. P. (2004). Language in the science classroom: Academic social languages as the heart of school-based literacy. In E. W. Saul (Ed.), *Crossing Borders in Literacy and Science Instruction: Perspectives on Theory and Practice* (pp. 10–32). Newark, DE: International Reading Association.
- Melo, M. C. (2009). *O Conhecimento (tácito) Histórico. Polifonia de alunos e professores*. Braga: Universidade do Minho.
- Ministério Da Educação (2001). *Currículo Nacional do Ensino Básico – Competências Essenciais*. Lisboa: Departamento da Educação Básica.
- Ministério Da Educação (2007). *Programa de Matemática do Ensino Básico*. Lisboa: Ministério da Educação, Departamento de Educação Básica.
- Moje, E., Ciechanowski, K., Kramer, K., Ellis, L., Carrillo, R. & Collazo, T. (2004). Working toward third space in content area literacy: an examination of everyday funds of knowledge and Discourse. *Reading Research Quarterly*, Vol. 39, nº 1, 38–70.
- Ramalho, G. (Coord.). (2001). *Resultados do Estudo Internacional PISA 2000: Primeiro relatório nacional*. Lisboa: Ministério da Educação, GAVE.
- Thuraisingam, P. (2001). Language use and interaction in the History classroom. Proceedings of 2nd Conference of Australian Association for Research in Education. <http://www.aare.edu.au/01pap/thu01057.htm>.
- Viseu, F., Fernandes, A. & Gonçalves, M. I. (2009). O manual escolar na prática docente do professor de Matemática. In B. D. Silva, L. S. Almeida, A. Barca, & M. Peralbo (Orgs.), *Actas do X Congresso Internacional Galego-Português de Psicopedagogia* (pp.3178–3190). Braga: Universidade do Minho.