

Journal of Academic Writing Vol. 2 No. 1 Autumn 2012, pages 14–23

Moving from Graduation to Post-Graduation in Portuguese Universities: Changing Literacy Practices, Facing New Difficulties

José Brandão Carvalho University of Minho, Portugal

Abstract

In this article we analyse Portuguese postgraduate students' problems and difficulties when performing written tasks in the context of postgraduate programmes. The data presented are the result of a study based on two different data collection procedures: a) the analysis of students' written work, organised in a portfolio; b) a questionnaire focussing on the difficulties encountered when performing different tasks involving writing: note-taking; planning a text; writing and editing a text (a literature review); and referencing and quoting according to a reference style (APA). The analysis of students' work revealed problems and difficulties in different areas, namely with selecting information, planning the text, and writing the literature review using academic writing conventions. When asked about the reasons for those problems, students often referred to the difference between the literacy tasks they were used to performing in their undergraduate studies and those that they are requested to develop at the postgraduate level. These differences seem particularly relevant when those tasks are related to assessment practices. At undergraduate level, assessment is often based on examinations, while at postgraduate level it is more dependent on the production of other genres such as literature reviews or essays.

Introduction

This article analyses writing difficulties of postgraduate students. The analysis is based on a study developed at a Portuguese university with students of a postgraduate programme (MA) in the domain of Education. The study aimed at describing how the students performed writing tasks involving the synthesis of a given number of textual sources. It was carried out because we found out that many postgraduate students have difficulties with some literacy practices, such as essay writing or literature review, which they are supposed to develop in the context of programmes like this.

This article has two parts. In the first part, we discuss the relevance of writing in educational activity and its role in assessment contexts; afterwards, we characterise the Portuguese context, referring to the most frequent writing practices and the way writing is involved in assessment tasks. In the second part, we present the study, describing the context in which it took place, the people involved and the methodology followed; then, we analyse data emerging from students' written products and their answers to a questionnaire, focussing on the difficulties felt when performing writing tasks in academic contexts.

1 - Writing at School

Writing is something that we can never dissociate from education. Schools appear as the main context where people are expected to acquire writing skills and develop their expertise in that domain. Besides that, we must consider that a great number of tasks students have to perform in educational contexts imply writing.

1.1 - Writing as a learning tool

Taking into account the characteristics of written language and the way it is involved in pedagogical activities, writing may function as a learning tool. Once it requires explicitness, written language can be a powerful instrument for building an abstract and coherent theory of reality. It enables the expression of logic relationships between different ideas, playing, therefore, an important role in the enhancement of the more complex forms of thought that characterise abstract logical reasoning (Olson 1977, Applebee 1984, and Bereiter and Scardamalia 1987). Writing promotes active knowledge construction whenever students engage in knowledge transforming processes rather than in reproductive activities. Used as a tool to develop concepts and generalisations, to promote critical thinking and problem solving, it helps students to analyse and reflect on their thinking and understanding and contributes to learning and remembering content information (Tynjälä, Mason and Lonka 2001, and Armbruster, McCarthey and Cummins 2005).

According to Hand and Prain (2002: 739-740), learning enhancement through writing is the result of four different factors: the demands placed on the learner by the writing task; the learner's metacognitive understanding of appropriate strategies to use; the contextual aspects including a classroom learning environment focused on deeper conceptual understandings rather than factual knowledge; a complementary match between genre or type of writing, conceptual structure of the topic, and broader curricular goals. These authors stress the importance of textual genres in this process, seeing them as frameworks for learning because knowledge of the micro and macro structure of texts, as well as the purposes of these structures, enables students to identify relationships between ideas, and hence clarify understanding of content.

In fact, writing may be implied throughout the whole learning process, concerning knowledge acquisition, elaboration and expression: we use writing to take notes during oral presentations of different natures (lessons, lectures, seminars...) or to register the main ideas of texts that we are reading; by writing we elaborate and reorganise knowledge, draw schemes or maps of concepts, synthesise or summarise information; and writing is probably the most frequent means for knowledge expression, especially when, in assessment tasks, students have to demonstrate what they have learnt. In these situations, it is not only necessary to know something but also to be able to write what we know. Expert writers can naturally express their knowledge better than developing writers do. Some students might fail not because they do not know the contents that are being assessed, but just because they are unable to write them down properly.

1.2 - Writing and assessment

Expressing knowledge is therefore one of the main functions of writing in education, implying different textual genres according to the contexts in which assessment takes place. Reports, literature reviews, essays and written answers in tests or exams are among the genres students may have to deal with in academic contexts. Their production may require generic writing abilities as well as specific capacities in order to fulfil the demands of the communicative contexts and respect the conventions that have to be followed according to the genres involved.

The analysis of writing practices associated with assessment tasks should not be confined to the genres students are supposed to write. It must consider other literacy practices related to them and the reading and writing processes those practices imply. These aspects are particularly relevant when we compare writing in tests or exams and writing other textual genres such as essays or literature reviews.

When assessment involves tests or exams, information sources are not usually accessible at the moment students have to express what they know and therefore it is important to acquire and elaborate knowledge in a way that enables an easy retrieval from memory; these processes are, obviously, very different from those developed when the objective is to write an essay or a literature review. Differences affect the whole writing process and the way its different components - planning, transcription and revision – are developed. As far as planning is concerned, content retrieval and organisation are naturally performed in a different way; the same happens with word and sentence formulation, as well as with the speed and the rhythm in transcription; and finally, we can say the same about revision and text improvement, more feasible when time is available than under the pressure of time limits in exams.

Other aspects must also be taken into consideration, especially those concerning quotation and referencing. These aspects have to do with the sources on which a text is based and the recognition of the authorship of the knowledge displayed. The accuracy of references and quotations is naturally more relevant when we are writing essays and other similar genres than when we write to answer test or exam questions. Quoting and referencing must be done according to the conventions or reference styles fixed by the academic community and following these conventions implies an appropriate use of language which demands the knowledge of certain fixed forms that are adopted and recognised by the whole community and characterise the texts it uses (Philips and Pugh 1987, Creme and Lea 2000 and Vásquez 2001).

2 - The Portuguese Context

To understand the study described in this article and the reason why it was carried out, it is important to know the characteristics of the context where it took place, especially in what concerns the use of writing for educational purposes and the assessment practices that imply the use of written language.

2.1 - Writing practices at school

The contribution of writing for learning has been recognised in the Portuguese elementary and secondary school curriculum since the 1990s. According to several documents issued by the Ministry of Education, writing plays an important role in cognition and learning enhancement. Students are encouraged to perform writing tasks involving compositional and non-compositional techniques in order to enhance knowledge acquisition and expression. They are supposed to develop project work, to write abstracts and résumés of texts. They are also advised to take notes while reading texts or listening to oral communications with the purpose of retaining and reorganising information, and also to use writing as a way of organising their ideas (Carvalho 2005). On the other hand, in universities, teachers and programme coordinators often refer in their evaluation reports to the necessity to enhance students' writing abilities so that they can fulfil the demands of academic work. Nevertheless, analyses of practices in Portuguese schools and universities demonstrated that writing is still approached in a traditional way, that it is more frequently used to reproduce, rather than to acquire and elaborate knowledge (Carvalho 2001).

As far as elementary and secondary education is concerned, data emerging from studies based on textbook analysis and on questioning teachers, demonstrated that writing was much more often used in knowledge reproduction tasks than in those concerning knowledge construction. Textbook analysis revealed that more than 80% of the tasks involving writing that could be found in such pedagogic materials had to do with *knowledge reproduction* tasks. At the same time, teachers questioned about the writing practices developed in their classes mainly mentioned tasks related to assessment, information transcription and answering questions in textbooks, exercise-books and worksheets. All this seemed to configure a context in which the use of *writing for knowledge reproduction* was predominant (Carvalho *et al.* 2006).

At an upper level, quantitative and qualitative studies focussing on university students' literacy practices (Carvalho and Pimenta 2007 and Carvalho 2008) showed difficulties in different aspects. Those difficulties concerned not only reading textual sources, registering, relating and organising information, but also other problems related to academic writing conventions, often ignored or misused. According to those studies, Portuguese university students used writing mainly to take notes during classes and to express knowledge in assessment contexts. Writing to elaborate knowledge, relate information or clarify ideas, did not seem to be frequent.

2.2 - Assessment

Traditionally, tests have been the most frequent form of assessing students in Portuguese schools. At the end of low secondary and secondary levels, students also have to deal with national exams. Tests and exams have also been the most common way of assessing students at university, as far as undergraduate programmes are concerned. Recently, and mainly due to changes introduced by the Bologna Process, other ways of assessing students, for example, oral presentations, project work or essay writing are becoming more frequent (Universidade do Minho, 2008). At postgraduate level, tests and exams still exist but, especially in some domains like Humanities or Education, essay

writing, literature reviews or project work have been for a long time the most common tasks associated with assessment practices.

3 - The Study

This study aimed at analysing how Portuguese postgraduate (MA) students in the area of Education write a synthesis or short literature review based on a given number of textual sources. Seventy students took part in the study. The majority of those students were low secondary and secondary school teachers in the area of Portuguese Language, History, Sciences and Mathematics who were coming back to the university in order to acquire a specialization in their domain of studies. Besides these, there were some professionals in other areas, such as nurses and psychologists, and also some recently graduated youth who were still looking for a job in the field of Education.

3.1 - The context

The study was developed in the context of a course on Educational Research Methodology. In this course students are expected to acquire the knowledge and skills, including reading and writing skills, which will enable them to develop research in order to prepare their Master's dissertation. This course includes two parts:

- a) a theoretical part focussed on research in general and educational research in particular, including the analysis of research paradigms (quantitative and qualitative), their theoretical and epistemological grounds as well as the respective research designs;
- b) a more practical section that includes the construction of data collection instruments, the development of data analysis techniques and also literature review procedures, including aspects related to academic writing conventions (reference styles).

This study is focussed on one of the assessment assignments that students had to perform in this course. This assignment included three tasks:

- a) reading and taking notes on some chapters (provided by the teacher) on the topics of the first part of the course;
- b) making an outline/drawing the plan of a text to be written in the next step (a literature review/synthesis of the contents of the chapters previously read);
- c) writing and editing a text, that should be no longer than 1,500 words, using a defined reference style (APA).

By the end of the semester, students were expected to deliver a portfolio integrating the products that resulted from the tasks described above. Afterwards they were invited to answer a questionnaire about the task. This questionnaire included an open question about the difficulties encountered when developing it.

The choice of a task that simultaneously aims at testing students' knowledge of some of the main topics of the course and enhancing their literacy skills is based on the assumption that students' involvement in meaningful literacy practices is the most effective way of acquiring and developing the skills those practices imply. Under this assumption, academic/pedagogical contexts are seen as complex social realities involving literacy practices in which students participate, and it is considered that students may acquire the skills and abilities that enable their progressive development and effective integration through that participation (Camps 2005).

3.2 - Data analysis

The data emerge from the review of students' portfolios, which included the products of the three tasks previously described - the reading notes, the text plan and the edited text - and from the content analysis of their answers to an open question about the difficulties they encountered when performing the tasks. Seventy students performed the tasks but only fifty-five of those answered the questionnaire.

3.2.1 - Reading notes

The analysis of the reading notes focussed on two dimensions: organisation and volume of information displayed. Organisation refers to the way content is structured and presented in the notes. Its analysis was based on categories adapted from another study, previously developed by our research team with undergraduate students (Carvalho and Pimenta, 2007). Three categories were considered: notes presented in a schematic way, notes presented as text and notes combining text and schemes. As far as the volume of information contained in the notes is concerned, three categories were implied in the classification: detailed notes, applying to the notes that contain a lot of information, usually those that include a paraphrase of each paragraph of the text; synthetic notes, referring to those that synthesise the main ideas of the source; and short notes, referring to very brief summaries of the texts.

3.2.2 - Text plans

The analysis of text plans focussed mainly on their organisation and took into account the expression of the logic and hierarchic relations between different aspects of the content displayed. Plans were classified into three categories, also adapted from categories used in the study referred to above (Carvalho and Pimenta 2007): schematic plans, in which the different topics are included in a scheme or diagram that shows the logic and hierarchic relations between them; plans organised as text, expressing the writer's intentions about the text that is going to be written; and simple lists of contents, ordered according to their sequence in the text, a kind of index of the text - some of these may be numbered and include subsections.

3.2.3 - Texts

The texts produced by the students were analysed taking into account the coherence of their structure and the relevance given to the different aspects of the content. More specifically, the following aspects were taken into account: the topics included and their development; how much information concerning each topic is included; the text organisation, with particular attention to the moment (or moments) each topic is approached and the way it is related with other topics; and referencing and quotation processes.

3.2.4 - The questionnaire

As we said above, the study included a questionnaire. Among other questions concerning different aspects, such as the students' academic and professional situation, their perceptions about the programme, the course and the assessment procedures and tasks involved, there was an open question focussing on the main difficulties encountered in the literature review. Content analysis of students' answers to this question enabled us to identify several categories and determine their frequency. It also enabled the retrieval of a set of meaningful examples that contribute to a deeper understanding of students' problems.

3.3 - Results

Data analysis shows how difficult it was for many of these postgraduate students to deal with some complex processes involved in the assigned written tasks. These difficulties may have to do with students' literacy practices throughout their previous educational path, which were mainly focussed on knowledge reproduction. Problems arose when they had to face different written assignments in the context of their postgraduate studies. This is recognised in their answer to the questionnaire and is also evidenced by the analysis of the different kinds of written products delivered.

3.3.1 - Reading notes

There are different ways of organising and displaying content in the reading notes analysed. The majority (63%) of the notes are organised as *text*, only 10% of them display the content in the form of a *scheme* or a *diagram*; there are also notes (27%) that *combine the two formats*, text and schemes. In what concerns the volume of information displayed, the analysis shows a relevant number (50%) of *detailed* notes; *synthetic* notes represent 39% and *short* notes are around 11%.

This analysis shows different levels of content elaboration: we can either find very complex forms of organisation revealing hard work in information processing or simple transcriptions, mere paraphrases of the sources that show less ability in catching what is essential; some students prefer to display the content in the form of a scheme or a diagram while others write a text in which they paraphrase, synthesise or summarise the chapters they are reading. The most complete formats are those that not

only display the content but also evidence the relationship between different aspects through the use of graphic devices (arrows, boxes, columns, or others). The selection of key words and the inclusion of the number of the pages, where contents can be found whenever necessary, are also characteristics of this kind of note. On the other hand, we can find low elaboration, even in long and detailed texts. Most of these detailed notes tend to be organised according to the titles and sub-titles of the original source and paraphrase or quote each one of its paragraphs. A considerable number of rather long reading notes, including too much information, can be found in the *corpus* analysed, which may be considered a symptom of reading difficulties concerning the selection of what is really important.

3.3.2 - Text plans

Drawing a text plan or outline seems to be a difficult task. In fact 35% of the students who took part in this study did not present any plan. Most of the plans analysed (84%) are *lists* of contents, a kind of *index* referring to the different sections of the text. The logical relationships between the different aspects of the content can be assumed from the way they are ordered and hierarchic relationships inferred whenever a section appears divided into two or more sub-sections. *Schematic* plans (8%) and plans presented in the form of *text* (8%) are less numerous. Irrespective of the format, we can find a significant number (50%) of plans that include, within each section, the reference to the authors who are relevant in that context.

Generally, we can conclude that the majority of the plans seem very simple, being mere lists of contents without any link between the parts except the order in which they appear and, in some cases, the division of each part into sub-sections. Only a few plans are rather elaborate, organising and hierarchizing the content in order to evidence the relationship between the different aspects involved. The analysis of the plans shows students' difficulty in organising different aspects in a logical way, something that is evident in some redundancy or in the exclusion of relevant aspects. Naturally, this is something that we can also detect in the texts students wrote at the end of the process.

3.3.3 - Texts

The logic and coherent organisation of the contents seems to be one of the aspects with which students have major problems. Redundancy and repetition are often evident, as some students structure their texts without being able to put together or synthesise aspects that appear in more than one source. Therefore, their texts appear as a succession of information separately retrieved from the texts they read. Besides this, other difficulties emerge from the analysis of the texts students wrote. Sometimes, important aspects are omitted, others presented in a very detailed way, with the inclusion of many non-relevant topics, while others, despite their interest and relevancy, are treated in a very brief way or even ignored.

One of the most frequent difficulties students show has to do with the reference style they are advised to follow. The style used is the APA style. It is previously presented and discussed in the class. Despite being given examples that they can check at any time, students often misuse it. An example of such misuse is the reference to authors quoted or referenced in the textual sources, who are cited as if they had actually been read. Students also fail in referencing certain kinds of texts, such as book chapters, frequently cited by using the name of the volume organiser(s) instead of the chapter author's name.

3.3.4 - The questionnaire

As we can see in Table 1, students mention different kinds of problems when asked about the difficulties they encountered when performing the reading and writing tasks. Some of those difficulties are related to the selection, synthesis and integration of content, while others have to do with the use of a reference style, concerning either quotation and referencing or the organisation of bibliography lists. Students also mention other difficulties, related to external factors such as difficulties in foreign languages or having little time to perform the task.

Table 1 – Difficulties reported by students

Difficulties	Frequency (n=55)
Organising reading notes	10
Selecting information	27
Summarising and synthesising	4
Relating and integrating different contents	36
Quoting and referring	15
Paraphrasing	7
Organising the bibliography list	3
Word limit	3
Reading foreign languages	5
Lack of time	8

A closer analysis of the students' answers may help us to understand the reasons for those difficulties.

Organising the reading notes, selecting and summarising information

Several students reported difficulties concerning the construction of reading notes, mainly on the selection of relevant information and its summary or synthesis. Some of them admitted they were not used to taking notes while reading:

'I had never done such a thing before...' (13)¹.

Selecting the essential information seemed to be a major problem concerning reading notes:

```
"...too much information in the texts seemed relevant." (5);
```

'It was difficult to select the content to include in the text...' (10, 11);

Summarising and synthesising the content of texts is also referred to as a problem:

'synthesising information in the reading notes' (5);

'...difficulties in writing a summary...' (34);

Integrating and organising the contents

Integrating and organising information seems to be the most frequent problem students had to face. In fact, this is reported by 36 out of the 55 students who answered the questionnaire. There were students who mentioned the difficulty in relating the texts:

```
'Integrating, in a whole, the content of different texts...' (1);
```

- "...establishing relationships between the texts..." (17):
- '...articulating the texts...' (41);
 '...to combine the perspective, the points of view of different authors.' (43).

Integrating ideas in a logic and coherent way is a problem reported by many students:

- "...linking ideas logically and coherently..." (36);
- "...connecting ideas and concepts..." (50/54).

These difficulties concern either plans or texts:

- "... the construction of the synthesis/plan demanded a good assimilation of the content of the texts in order to identify the common aspects, to find a linking element, to put ideas in a sequence.' (45)
- '... difficulties in writing the final summary...' (34);
- '...linking the reading notes in the final text.' (42).

[&]quot;...to understand what really matters." (50).

¹ In brackets is the number that was randomly assigned to each respondent.

Students also referred to some difficulty in determining the relevance to be given to different aspects:

- "...evaluating the relative importance of each aspect." (39);
- "...giving each aspect its adequate relevance." (40).

Among the reasons for such difficulties, students mentioned the non-existence of questions to guide the text production:

'there wasn't any question to answer...' (33).

Quoting and paraphrasing

Difficulties concerning quoting and paraphrasing were reported by some students. These difficulties have sometimes to do with finding other words to say things or the fear of distorting or misrepresenting the original ideas:

```
'I tended to copy the authors' words...' (9);
'I feared I could distort the words/ideas.' (55).
```

Integrating references and quotations is the text is also mentioned:

'...integrating the authors' ideas in the structure of the text...' (4).

Word limit

Having a limit in the number of words in the text seems to be a problem for some students, something that is obviously related to difficulties in synthesising and summarising:

- "... synthesising all the contents within a limited number of words..." (16);
- "... writing a text with a limited number of words..." (43).

Organising the bibliography

The organisation of the references at the end of the text was difficult for some students, despite the possibility of looking at examples previously given. These difficulties mainly concerned certain kinds of texts, such as book chapters:

'The most difficult was organising the references list, mainly when there was an article with several authors or when it was a text that was inserted in a book with contributions of different authors.' (26).

Other difficulties

Besides the problems described above, students also mentioned other problems. These are not directly related to the writing process, they arise from other factors, such as difficulties in reading texts in foreign languages (there was one text in Spanish and one in English) or lack of time to perform the task.

Reading foreign languages

Difficulties in reading English are a handicap many students recognise; some of them did not even include the text written in English in the literature review:

'... reading that text was difficult, I do not master the English language.' (19).

Lack of time

Many students complained about having little time to perform the task. They could hardly cope with studying and working at the same time. Besides this, they had four courses per semester. This problem was mentioned by many students and, in their opinion, it affected the quality of the work they did:

- "... not enough time to do everything we are required to do in the courses..." (3);
- '... doing many things simultaneously affects the quality of our work.' (23);
- 'There were many texts to read in little time ...' (35).

Discussion

Both the analysis of students' written products – reading notes, text plans and literature review/synthesis - and their answers to the questionnaire, show that many students had difficulties in performing the tasks they were assigned. These difficulties concern three main aspects: reading and selecting relevant content; organising and synthesising information retrieved from different textual sources; and making use of conventional forms adopted by the academic community, for example, following a reference style either when introducing quotations and references in the text or when organising the bibliographic list.

It is possible to infer from the students' answers that many of them were unfamiliar with tasks like the one they had been assigned. Some of them explicitly admitted that it was the first time they had to deal with such a work and it had been difficult for them to understand what they were expected to do. These difficulties may be related to students' previous experiences at school and the literacy practices they had. These practices emerge from three different contexts.

The broadest context is that of the students' past schooling experience and the literacy practices they had been used to. As we said above, in Portuguese schools, writing is rarely seen as a learning tool and students are more often asked to use it in knowledge reproduction tasks than in knowledge construction ones.

The second context corresponds to the postgraduate (MA) programme these students were attending. This programme demands new and more complex reading and writing practices, it implies new genres, different from those students had been used to in the past. Their production is expected to be based on a process that involves not only more complex reading and writing strategies but also the use of the conventions or reference styles that a particular academic community has adopted in order to recognise and respect the authorship of the knowledge that in such contexts is being mobilised.

The third, and more specific context, is that of the discipline or course in which the writing assignment is being developed. Focussing on an object many students are dealing with for the first time - educational research methodology - this course naturally involves its own theoretical constructs and concepts which are conveyed by a specific language students were not acquainted with. This is definitely a factor that has to be considered in the analysis of the difficulties students felt when performing the writing task they had been assigned.

The results of our study show how difficult it may be for Portuguese postgraduate students to deal with literacy practices they are not familiar with. Nevertheless, the evidence presented in this study concerns not only these postgraduate students but affects Portuguese education as a whole and demonstrates that many theories and practices should be changed in this domain. As far as writing is concerned, its involvement in knowledge acquisition and expression processes must be recognised and considered in the tasks students have to perform in different contexts and disciplines, according to their age and their school level. More than specific courses aimed at fostering writing abilities, the implication of writing in pedagogical activities and students' engagement in meaningful literacy practices in the context of different disciplines, appear as the most effective ways of promoting their skills and enabling them to accomplish the tasks they have to deal with in academic contexts.

References

- Applebee, A. (1984). 'Writing and Reasoning'. Review of Educational Research, 54, 577-596.
- Armbruster, B, McCarthey, S., and Cummins, S. (2005). 'Writing to learn in elementary classrooms'. In *Learning to Write, Writing to Learn Theory and Research in Practice*, ed. by Indrisano, R. and Paratore, J. Newark: I.R.A., 71-96.
- Bereiter, C. and Scardamalia, M. (1987). *The Psychology of Written Composition*. Hillsdale, New Jersey: Lawrence Erlbaum Associates.
- Camps, A. (2005). 'Pontos de vista sobre o ensino-aprendizagem da escrita'. In *A Escrita na Escola, Hoje: Problemas e Desafios*, ed. by Barbeiro, L. Braga: CIEd/UM, 11-26.
- Carvalho, J. B. (2005). 'Writing as a Learning Tool: a New Conception of Writing in the Portuguese Curriculum'. In *Reading, Writing, Thinking Proceedings of the 13th European Conference on Reading* ed. by Pandis, M., Ward, A. and Mathews S. Newark: International Reading Association, 183-187.
- Carvalho, J. B. (2008). Acquiring, elaborating and expressing knowledge a study with Portuguese university students. *Zeitschrift Schreiben* [online] 1.07.2008 available from http://www.zeitschrift-schreiben.eu/Beitraege/carvalho_Acquiring_Knowledge.pdf
- Carvalho, J. B. (2011) 'Escrever para aprender contributo para a caracterização do contexto português'. *Interacções*, 19, 219-237.
- Carvalho, J. B.; Pimenta, J.; Ramos, J. and Rocha, S. (2006). 'Uses of Writing in Portuguese Basic School'. In *Studies in Writing: PREPUBLICATIONS and ARCHIVES* Repository of the 'SIG Writing Publications [online] available from http://sig-writing.publication-archive.com/show?repository=1andarticle=248>
- Carvalho, J. B. and Pimenta, J. (2007). 'Writing to Acquire and Express Knowledge: A Study with University Engineering Students'. In *Literacy without Boundaries Proceedings of the 14th European Conference on Reading*, ed. by Shiel, G., Stričević, I. and Sabolović-Krajina, D. Osijek: Croatian Reading Association, 327-330.
- Creme, P. and Lea, M. (2000). Escribir en la universidad. Barcelona: Editorial Gedisa.
- Hand, B. and Prain, V. (2002). 'Teachers Implementing Writing-To-Learn Strategies in Junior Secondary Science: A Case Study'. *Science Education*, 86, 737-755.
- Olson, D. (1977). 'From Utterance to Text: The Bias of Language in Speech and Writing.' *Harvard Educational Review* 47, 257-281.
- Philips, E. and Pugh, D. (1987). How to get a Ph. D.. Buckingham: Open University Press.
- Tynjälä, P; Mason, L. and Lonka, K. (2001). 'Writing as a learning tool: an introduction'. In *Writing as a Learning Tool. Integrating Theory and Practice*, ed. by Tynjälä, P., Mason, L. and K. Lonka, K. Dordrecht, Netherlands: Kluwer Academic Press, 7-22.
- Universidade do Minho (2008). Relatório de Concretização do Processo de Bolonha na Universidade do Minho. Braga: GAQE/Universidade do Minho.
- Vásquez, G. (2001). Guía Didáctica del Discurso Académico Escrito. Madrid: Editorial Edinumem.