1 Writing in Higher Education

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Why is it necessary to teach writing in higher education? Shouldn't students have developed writing skills by the time they reach this level? Is a first-year workshop enough? Who is responsible for teaching writing at the university? In what situations? In this chapter, I address these questions starting from the idea that writing is one of the most powerful learning "methods" and therefore, cannot be left for students to sort out on their own. I also work from the understanding that any subject is composed—in addition to a set of concepts—by specific modes of thinking linked to particular ways of writing; and that these forms must be taught alongside course content. As a sample of my pedagogical work, I analyze four pedagogical situations where writing functioned as a tool to work and re-work the concepts of a social sciences subject.

> Academic writing is influenced by life-histories. Each word we write represents an encounter, possibly a struggle, between our multiple past experiences and the demands of a new context.
>
> – Aitchison et al., 1994

Getting Worried or Getting Busy with Writing and Reading

"Students don't know how to write. They don't understand what they read. They don't read." These kinds of complaints, often raised by instructors, appear throughout the whole educational system. They start in elementary school and continue through college. And the responsibility always seems to be somebody else's: the primary school should have done something, and it didn't; parents should have done something, and they didn't, etc. Similarly, it is often said that secondary education (or introductory courses) should have prepared students to write, read, and study prior to reaching higher education.

This complaint is both a fallacy and a rejection of responsibility for writing and reading instruction across grade levels. This reasoning starts from a hidden premise; an assumption that, once revealed, is proven false. David Russell has shown that it is common to suppose that writing (and reading)

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are generalizable skills, learned (or not) "outside a disciplinary matrix … and not related in any discipline-specific way to the professional" (p. 53):

> Writing thus came to be seen as a 'ding an sich', a separate and independent technique, something that should have been learned elsewhere, taught by someone else—in high school or in freshman service courses. Hence the almost universal complaints about students' writing and the equally ubiquitous denials of responsibility for teaching it. (Russell, 1990, p. 55).

This idea that reading and writing are separate and independent skills from the learning of a discipline is as widespread as it is questionable. Numerous researchers assert, on the contrary, that the kind of reading and writing demanded in higher education are learned when confronting the discourse production and text consultation practices particular to each subject area, and dependent on receiving orientation and support from someone who masters the subject and participates in these literate practices.

Without underestimating the valuable work performed by the reading and writing workshops that some universities include at the beginning of their undergraduate programs (for example, Di Stefano & Pereira, 2004), it would seem that this labor is intrinsically insufficient. That is, the nature of what must be learned (reading and writing the specific texts of each subject matter in the frame of each academic discipline's practices) demands an approach from within each subject area. A reading and writing course, separate from the literature, methods, and conceptual problems of a specific academic and professional field, serves the purpose of setting in motion a reflective attitude towards textual production and understanding. Simultaneously, it helps to create an awareness about what many academic genres have in common, but does not elude the discursive and strategic difficulties students face when confronted with the challenge of *thinking through writing* about what they study in each subject. According to Bailey and Vardi (1999), it is the specialists of each discipline who are best equipped to support writing at the higher level, not only because they are familiarized with the conventions of their subject matter (though often unaware of them), but also because they are experts in the difficult subject matter that students are trying to master. However, rather than constructing a dichotomy between writing workshops or disciplinary courses with integrated reading and writing instruction, the question worth asking is whether a single course, at the beginning of the undergraduate program, is *enough* to learn how to read and write for the years to come. Pedagogical movements such as writing across the curriculum (WAC) and writing in the disciplines (WID) argue that it is not. Instead, within the universities where these movements have gained influence,

they have taken collective responsibility for the production and analysis of texts found far and wide across the university cycles (Gottschalk & Hjortshoj, 2004; Hillard & Harris, 2003; Monroe, 2003).

That writing poses a challenge in higher education is not due, then, just to the fact that students come ill-prepared from previous educational levels. Difficulties are inherent to any attempt to learn something new. What must be acknowledged is that the form of writing expected by academic communities at the university is not an extension of what students have previously learned. They are tasked with learning new discursive forms that challenge novices and that, for many students, often become insurmountable barriers if they don't have mentorship and support to help them. Linda Flower, one of the researchers who has contributed the most to the study of writing processes, evolved her initially cognitive approach to account for the existence of substantive differences between different written *cultures*, cultures which outsiders are unaware of:

> Student writing is an act of border crossing—or of standing at a threshold trying to figure how to cross. As writers move from home to school, through kindergarten to college, and from discipline to discipline, they encounter a variety of discourse communities, with their special languages and conventions, with their standards for argument, evidence and successful performance, and with their own histories as a discourse from which has emerged a body of commonplaces, topoi, and "key" issues insiders share. (Flower & Higgins, 1991, p. 1)

As I wrote about in Chapter 4 of this volume, these conventions are called "genres" and constitute an important part of what students have to learn when they learn a discipline.[1] Therefore, it is necessary for instructors to integrate them into their classes as objects of teaching.

Taking Responsibility for Reading and Writing in Every Subject

There is yet another reason that justifies the inclusion of reading and writing as inseparable from the teaching of the disciplinary concepts of each subject. This

1 Translators' note: Carlino, P. (2005). Enseñar, evaluar, aprender e investigar en el aula universitaria de la mano de la lectura y la escritura. [Teaching, assessing, learning and researching in the university classroom hand in hand with reading and writing]. In: *Escribir, leer, y aprender en la universidad. Una introducción a la alfabetización académica* (pp. 151-181). Fondo de cultura económica.

reason appears outlined in the epigraph written by Aitchison, Ivanič and Weldon (1994) that opens this chapter. These authors point out that to write is to relate what one already knows to the demands of the current writing situation, and that this relationship is not easy, because it entails building a nexus between new and old knowledge. This nexus is not given to the student nor found in their writing context, but demands from the writer a personal connection and elaboration. In this process, old knowledge needs to be re-thought and organized differently, so that it becomes compatible with the requirements of the composition task. Now, the exigency is to build new knowledge that writing stimulates which coincides with the mechanisms that psychology has pointed out as implicated in all learning. In other words, writing sets in motion learning processes that do not always occur in the absence of writing. Hence, the other reason why instructors of any subject should occupy themselves with students' writing is that doing so directly contributes to students' learning of their subjects' concepts.

Therefore, given that there is no appropriation of ideas without re-elaboration, and that the latter depends to a great extent on the analysis and writing of academic texts, reading and writing are distinctive learning tools. And since it is not possible to take comprehension and written production procedures for granted, it is necessary for the instructor to guide and provide support so that students can implement them. Taking charge of teaching reading and writing in higher education is a way of teaching learning strategies (Chalmers & Fuller, 1996). Taking charge of teaching reading and writing in college is helping students learn.

Taking charge of teaching writing is also a way to increase student participation and engagement. I have experienced this myself as I explained in the beginning of the introduction to this book, as well as further along in this chapter and in the first point of the section "Main ideas that run through the previous chapters," in Chapter 4. But evidence for this type of engagement can also be found in a survey of a sample of 350 Harvard University students which asked them how they view their educational experiences at Harvard University. For these students,

> The relationship between the amount of writing for a course and students' level of engagement—whether engagement is measured by time spent on the course, or the intellectual challenge it presents, or students' level of interest in it—is stronger than the relationship between the students' engagement and any other course characteristic. (Light, 2001, p. 55)

In synthesizing all of these ideas, it is necessary to consider the teaching of reading and writing throughout higher education for several reasons. On

the one hand, learning the contents of each subject consists of a double task: to appropriate the discipline's conceptual-methodological system and also its characteristic discursive practices, since "a field is as much a verbal and rhetorical as a conceptual space" (Bogel & Hjortshoj, 1984, p. 12).[2] On the other hand, in order to take ownership of this content, students have to reconstruct it over and over again, and reading and writing become fundamental tools in this task of assimilation and transformation of knowledge. Therefore, students need to read and write in order to actively participate and learn. Is it not the instructor's job to help them achieve this?

In the two sections that follow, I delve into the idea that writing can be an instrument to understand, think, integrate, and develop new knowledge.

Writing's Potential to Impact Thinking

As opposed to spoken language, writing establishes a delayed form of communication. Writer and audience do not share space nor time. This feature of writing demands that the composer reduce the ambiguity of their text in order to minimize the chance that the reader will misinterpret their words. In other words, the author is not present at the moment when the text is read and cannot clarify what they meant to say. To be understood across this distance (spatial or temporal), it is necessary to use language in a particular way: affording it enough informative cues so as to guide the reader to the intended meaning. It requires anticipating the knowledge available to the audience, so as to not take for granted what they, by themselves, will be unable to guess. It requires the writer to use language in a way that is "dis-embedded" from its immediate situation (the here and now). For these reasons, it is necessary to produce a text that is as autonomous as possible.

But if writing poses these *exigencies*, it also offers *affordances* absent from oral communication. What are these? They are the means available to the writer to achieve the efficacy of their written text and to avoid being misunderstood. Firstly, and thanks to the fact that the author doesn't need to face an audience, the writer can take the time to think about what they want to say, why they want to say it, and how they want to say it: they can plan the content, clarify the composition's purpose, and anticipate the organization of

2 As I develop in the sixth point of the section "Main ideas that run through the previous chapters" found in Chapter 4, "discursive" alludes to language practices (including reading and writing), to the situated *use* of language, according to specific intentions and ways of thinking. "Rhetorical" alludes to the context where that language is used, to the *relationship* between the speaker and the audience, and to the *purpose* each one expects to realize through the linguistic exchange.

the text. Secondly, they can revise: go back over the writing as many times as they may wish to re-read, think again, critique, and change it. They can decide to modify what they want to say and achieve with the writing: they can plan again. All of this, without the reader noticing, without anyone suspecting that behind the written product there was a recursive back and forth process of thinking and questioning.

Since writing is not a spontaneous language but a language that is anticipated and reconsidered, those who write professionally say that composing a text has an impact on the development of their thinking. This is expressed in the motto of the Writing Program of the University of Georgia, a U.S. university:

> A writer is not so much someone who has something to say as he is someone who has found a process that will bring about new things he would not have thought of if he had not started to say them. (William Stafford)

Writing stimulates the critical analysis of one's own knowledge because it allows one to maintain focus on certain ideas, which in turn is made possible by the stable nature of writing, as opposed to the volatility of thought and spoken language. However, researchers agree that this benefit is not an automatic consequence of written composition but a result of approaching writing from a sophisticated perspective. Writing has the potential to be a way of structuring and modifying thought, but we do not manage to take advantage of its epistemic function every time (Wells, 1990). There are ways of writing that do not lead to transforming the writer's knowledge but simply to transcribing it. What is the difference, then, between the process of a writer who modifies what they think when they start to write it, and the scribe who only puts down on paper what they already know about a subject?

According to Nancy Sommers, current director of Harvard's Expository Writing Program, composing opens doors to discover ideas, provided that the writing is revised by comparing the text produced with the text that a potential reader may require. In her study, experienced writers (journalists, editors, and scholars),

> …imagine a reader (reading their product) whose existence and whose expectations influence their revision process. They have abstracted the standards of a reader and this reader … functions as a critical and productive collaborator … The anticipation of a reader's judgment causes a feeling of dissonance when the writer recognizes incongruities between intention

> and execution, and requires these writers to make revisions on all levels. (Sommers, 1980, p. 385)

Linda Flower (1979) also understands that revision not only improves the written product but allows the development of the writers' knowledge every time they attempt to transform private prose into a text that takes into account the perspective and context of the audience.

Similarly, Scardamalia and Bereiter (1992) suggest that there are two ways of composing, which they model and call "knowledge telling," as opposed to "knowledge transforming." In the first model, the writer retrieves from memory what they know about a subject and expresses it on paper. In the second model, the writer considers the rhetorical situation in which they compose; that is, they analyze what they want to achieve with the text and anticipate the expectations of the audience. According to the writing purpose and depending on how they represent the informational needs of a potential reader, they (re)conceive what they know in order to adapt it to the communicative situation within which they are writing. In this way, they bring into interaction two types of problems: rhetorical (related to effective communication with the reader) and semantic (related to the content and ideas being addressed).

For these researchers, only one that writes according to the "knowledge transforming" model gets to change what they previously knew about a subject. This happens because in transformational writing they develop a dialectic process between their previous knowledge and the rhetorical exigencies to produce an adequate text (Scardamalia & Bereiter, 1985). The dialectic nature of written composition lies in the conflict the author faces between the limitations of their own knowledge and the need to produce an effective text. In other words, experienced writers have their reader in mind as well as the effect they want to achieve on them through their writing. That is, they pay attention not only to the subject on which they are working, but also accommodate it to the informative needs of their audience. In this effort to adjust the subject to what is supposed to be most convenient to both the reader and purpose of the writing, the writer must de-center from their own point of view and adopt the audience's perspective. In some cases, they will notice that there's a lack of information and will search for it themselves. In other cases, they will perceive certain ideas to be confusing, and will proceed to clarify them for themselves. They will understand that their text gains in clarity if the relationship between its parts are made explicit. They will be able to find instances of incoherence and will aim to remedy them. They will wish to persuade their reader and will search for

new arguments. They will group related notions that were previously scattered. They will produce a more agile prose (simplifying expressions, adding subtitles, using a variety of syntactic structures…) when in re-reading their text they anticipate a bored reader. They will decide to trim their text to strengthen the core ideas, painfully letting go of concepts that stray away from these. And during these revisions, they will probably discover that the attempt to modify aspects of form has led them to think about the content in novel ways.

In synthesizing all of these goals, writing with rhetorical awareness leads to the development and consistency of one's own thinking. Problematizing writing from the stance attributed to the audience entails questioning the available knowledge and putting in conversation the problems of content with the rhetorical problems, trying to adjust what the writer knows to what the reader needs, and thereby allowing for the transformation of the original knowledge.

The Challenge of Using Writing as a Means to Explore Ideas

The process explained before is an ideal model, a potential of writing enacted only by those who have experience writing within a discourse community where, to belong, it is necessary to compose with rhetorical awareness: anticipating the effect of the text on the reader. The planning and revision of writing, at textual levels that demand reformulating one's own knowledge, are not operations universally put into play.

Numerous studies (see Table 1.1) show that, under the usual conditions in which they write to be assessed, college students do not manage to make an epistemic use of writing; that is, as a cognitive tool to organize what can be thought about a topic. And they fail to do so because they approach the first revision as an exercise in proofreading but not as a means to reconnect with a subject, discover what is possible to say about it, and develop their knowledge. Students (and also many graduates) tend to keep the ideas present in their texts and, even when they revise, will modify only surface issues. It's as if they fell in love with what they have laboriously elaborated and cannot conceive of sacrificing it for the sake of a better, yet uncertain, future version.

In her research with university students and experienced adult writers, Sommers (1980) shows that the unit of analysis students perceive when revising their compositions are words or phrases, but not the text as a whole. They focus on their writing in a linear manner, as a series of parts. For

them, writing is translating thought into language and speech into prose. In this attempt at translation, "an original text already exists for students, one which need not be discovered or acted upon, but simply communicated" (p. 382). In contrast with professional writers, who measure their produced text against the expectations of an internalized reader, when revising students compare their writing with a meaning predefined in their original intention. That is, they don't consider revision an activity through which it is possible to modify and develop perspectives and notions. They consider it a mere corrective process to fix errors. According to Sommers, as instructors we must help them overcome this conception: we must *respond* to what students write with comments that encourage them to take the risk of changing their ideas:

> Our comments need to offer students revision tasks of a different order of complexity and sophistication from the ones that they themselves identify, by forcing students back into the chaos, back to the point where they are shaping and restructuring their meaning. (Sommers, 1982, p. 154)

When I first read this quotation, the idea of "chaos" seemed strange to me and even displeased me. Two or three years later, I began to understand it. Every time one writes with commitment about a subject and tolerates the uncertainty of what is not yet imagined, thought and language appear confounded in an apparent disorder that can be unsettling. Sometimes I wanted to flee from this chaos and quickly established a text that brought me nothing new, but closed the flank of uncertainty. But other times, with a demanding internalized audience, I learned to remain longer in this confusing phase of writing, where the blank page alternates with attempts and blurbs. At other times, when my work had taken shape, despite revising it over and over again, I could see no other shape than that of what was already written and could only reformulate it to optimize its substance by receiving the comments of a close colleague. The same thing usually happens to me when I send an article for publication to a research journal and the anonymous reviewers suggest that I revise some parts: at first, I begrudge this extra task, but always, after it is done, I feel satisfied with what I have achieved in the additional rewriting and grateful to the person who forced me to reopen my ideas. Having a text disassembled, malleable, subject to major changes, is distressing. I always doubt whether something good will come out after so much work. Then comes the discovery of what was not there before, some fertile idea in which the same thing is no longer the same, the connections between thoughts have been extended. I believe

Sommers uses the term "chaos" to describe this indeterminacy that allows for the emergence of the novel. And she proposes that instructors offer feedback with comments on student writing, comments that do not center on the surface but on the ideas behind the text. Hjortshoj (2001) also addresses this issue by employing an illuminating metaphor, which points to the premature solidification of student writing. This teacher-researcher at Cornell University, responsible for the Writing in the Majors Program, points out that:

> From the writer's perspective, every text "forges" at some point in the process, hardening like cement. Beyond that point, when language and thought have lost their malleability, something on the order of dynamite is required to promote profound change. More experienced writers delay this point of solidification and thoroughly reconsider and revise their work before a complete first draft is completed. Student writing, on the other hand, tends to forge almost as soon as it hits the paper.… First thoughts become last thoughts, and second thoughts seem destructive.

This early 'solidification' of an immature text appears as a constant in students' writing, who tend to revise their productions line by line and modify only surface features. They do it, in part, because no one has taught them otherwise, due to the tight time constraints assigned to writing in educational institutions, and because they only write for assessment purposes. If we want different results, we need different processes. Higher education requires that we as instructors also function as readers of students' texts. Readers with whom to put their writing to test. Readers who save for the end the comments on spelling and grammar and focus initially on how they receive the substantive contents of what they have written.

In sum, students lack a sense of audience and do not try to adapt their texts to what they assume their readers need. In fact, they tend to have few readers, because they are not in the business of publishing and because in the classroom they write mainly to pass their courses. The university needs to provide readers who give students feedback on the effect that their texts produce. Instructors need to teach students how to plan and revise writing and help to anticipate the recipient's point of view, so that in this process they not only improve the product, but also guide its authors to practice writing as a tool for thinking about the contents of each subject. Table 1.1 explains why most students do not know what and how to revise in the texts they write.

Table 1.1 On Why It Is Necessary to Revise Writing

Revising writing is not a self-evident procedure: it is necessary that the instructor brings it to light

When students make a draft to write a text, they do not usually make major changes in the passage from the first to the second draft. Research by Jackson et al. (1998), Lehr (1995), Schriver (1990), Sommers (1980), and Wallace and Hayes (1991) argue that college students, when revising the texts they produce, tend to focus only on local aspects (punctuation, grammar, etc.) and retouch them superficially.

I propose to understand this difficulty as an epistemic obstacle inherent to the relationship established between the subject and their attempt to learn to revise. Indeed, revision procedures, which in this case is to be learned, are not transparent social practices. On the one hand, the revisions made to texts leave no traces, that is, the final writings do not keep their history, they do not reveal to what extent they have been revised and changed. On the other hand, the cognitive task of the reviser is also concealed and difficult to interpret. Thus, when on a rare occasion we have the opportunity to observe someone revising their manuscript, we only manage to see that they read, cross it out, rewrite it, and, eventually, point out some transposition. It is opaque to look through the graphic marks left behind. It is not possible to discover which are the units of analysis and distinguish them from the textual modifications made. Nor is it possible to discern the reflection that leads to the desire to modify it. If the reviewer takes into account their audience, this goes completely unnoticed by an eventual spectator. To an even greater extent, everything becomes obscure when the reviewer uses a computer monitor: perhaps they spend more time rereading the text than when they write it, but little else can be noticed differently. Therefore, what is reviewed and how it is carried out is not discernible let alone an obvious fact.

There are two more reasons that explain the difficulties of revising and modifying texts in a substantive and global way. First, it is easier to consider parts of a text rather than the text as a whole. This happens because the whole not only contains the parts, but rather is constituted by their mutual relationships (in many cases, tacit) and attending to this structure entails situating oneself in a higher level of analysis. Second, there is a tradition in schools to correct students' texts linearly. Following the order in which they read, teachers mark orthographic and grammatical mistakes, and sometimes confusing disciplinary content. Therefore, students are often exposed to implicit models of detecting local problems in texts: they are rarely given global observations (in terms of the meaning and organization of the writing).

The combination of these reasons (the invisibility of the revisions underlying a text, the opacity of the know-how of the reviewer, the tendency to focus on parts instead of the whole, and the school tradition to mark texts line by line) indicates a starting point that needs to be reversed. Students need an instructor who will help them develop categories of analysis, beyond the local, to re-read and diagnose the problems in their writing in order to improve them comprehensively.

But there is an additional reason that justifies that, as instructors, we teach our students to revise their writing. Substantial revision (revising its content, structure, and effect on the reader) is not only a cognitive operation, but is part of a specific social practice for producing texts. This is carried out only in certain communities that use writing for specific purposes. Not everyone who writes revises in the same way as in the academic world. It is up to the university to teach the writing and thinking practices unique to the disciplinary contexts in which students write.

Experienced Writing Situations

The course "Theories of Learning," taught by the School of Humanities of Universidad Nacional de San Martín, was in my charge for six years.[3] When I started teaching it in 1997, I decided to multiply and include—within its explicit curriculum—activities focused on textual production and comprehension, as I was convinced that the appropriation of disciplinary content cannot happen in the absence of their written elaboration. In the following section, I will address four activities that I put into action in this course: a) rotating elaboration of class syntheses, b) tutoring for group writing, c) exam preparation, and d) written responses to questions about assigned readings. These situations share the principle of recursivity (see the second point of the section "Central ideas that run through the previous chapters" in Chapter 4): they require going back to what has been written and to the thinking that has been constructed through it. They also have in common the fact that they include moments of revision of the writing, in which, as an instructor, I intervene from the point of view of an external reader who demands an autonomously comprehensible text; that is, a text in which the ideas are developed and organized to facilitate the reader's task.[4]

Rotating Elaboration of Class Syntheses

Many things happen in a four-hour long class period. One part can be devoted to individual work, in pairs and/or teams of students, based on prompts prepared by the instructor. Another part corresponds to the "theoretical" exposition; with it, the instructor intends to help the students to elaborate on the topics within the subject. Teachers introduce concepts, take up notions developed in the assigned readings, explain them, clarify students' concerns, promote the linking of ideas, answer and formulate questions, make reference to issues addressed in previous classes, etc. The instructor knows, from the offset, what the core concepts are; that is, the elements that make up the heart of the issue under study. On the contrary, an important portion of the students' learning consists in re-constructing the topic of the class: realizing the key

3 Weekly classes were focused on theoretical and practical concerns and lasted four hours, with a break halfway. To be enrolled in this major, the students had to be teachers of physics, chemistry, mathematics, or biology, and had to have graduated from a four-year teacher education program. They practiced as teachers in middle, high schools, and city colleges. Their age ranged from 25 to 45. Some of them had more than 20 years of teaching experience.

4 For other pedagogical writing tasks, see also Chapters 2 and 3 of this book. In practically all the teaching and assessment situations I have tested, reading and writing are interconnected.

ideas that were worked on, etc. This process involves inferences, generalizations, and the establishment of a hierarchy among the notions discussed. The writing assignment I propose brings this activity to the forefront and is in line with the idea that there is no one better to guide the writing of the synthesis of a class than the instructor who has taught it:

> Making notes from text, or from lectures, for example, are not detachable skills that can as well be taught by the counseling service or by a study skill expert. The effectiveness of good note-taking depends upon what it is you are taking notes of, and the best judge of that is the teacher, the content expert (Biggs, 1996, p. viii).

Deciding What Was Most Important

This activity involves having a pair of students keep written records of the development of the class each week; then, at their homes, they select the most important concepts and make photocopies to distribute among their classmates with an exposition—one or two pages—of what was covered in the previous class. The prompt is for the written text to be understandable by anyone who was absent from the class. For this reason, an autonomous text must be achieved (as opposed to personal notes). These syntheses are then read at the beginning of the following class in order to recover the thread of what was covered in the previous one. However, the text is not considered finished, rather, we collectively make comments to improve it. My interventions as an instructor focus on identifying the difficulties in understanding the topic addressed in the previous class. Thus, when there are unclear or erroneous concepts in the text (which is almost always the case, as is to be expected in a group that is learning), I take the opportunity to point them out, re-explain them and suggest reformulations in the text that is being discussed. In general, these confused ideas are almost always mixed with obscure or imprecise forms of expression. In other words, the reading of the class syntheses allows for a review and reworking of both their content and their written formulation.

To prevent the activity from becoming routine, after several sessions in class, the analysis of the synthesis is done at home, so that the students and the instructor contribute their observations and suggestions for change at the beginning of the following class in shared, whole-class discussion. The students keep the syntheses and use them to review the contents of the course. These syntheses provide students with an orientation of the reading of all the scholarship assigned to prepare for the final exam.

At the beginning of the course, before students are in charge of making these syntheses, I take notes myself during the first and second class, and in the third, I take and distribute copies of my records, one in narrative and one in expositive form.[5] We read and analyze them to reflect on the difference between narration and exposition, on the different functions of writing (mnemic, communicative, and epistemic) and on the spiral curriculum that this task favors, since it requires reworking the same contents. In this way, I propose that the students take turns recording/synthesizing for the remaining classes. My participation as the first "synthesizer" offers a text model and creates the conditions for the students to engage with the task as much as the instructor. We agree that, from then on, the synthesis will be made in a predominantly expositive mode, because this is the textual discourse that serves to put forward the contents covered (as opposed to narrative synthesis, that highlights who said what when). At the end of this chapter, in the appendices, I show the two first synthesis made by myself as well as one made by a pair of students in the seventh class.

There are several teaching objectives to this activity: to offer students a writing task with a real audience, to have them review the topics discussed in the previous class and to have them determine their relative importance, to give them experience with the collective revision of a text as a procedural model that they can transfer to other situations, and to make them aware of the textual levels involved in the evaluation criteria applied by the instructor. Lastly, the activity aims to normalize difficulties in comprehension, as something to be expected and not criticized, and to provide an opportunity for the concepts that pose difficulties to be explained again.

As a *writing* task, the activity puts the *planning* of the text in the foreground: the limited space forces those who make the synthesis to carefully select and organize the contents included, which implies determining the relative hierarchy of the concepts that were discussed in class. When the synthesis is read, the operation that the group of students puts into practice is *revision*. This is done at different textual levels (according to the problematic focus of the text produced). By virtue of this revision, the authors of the synthesis receive comments from real readers about their writing. In fact, this is one of the few writing situations within the educational context where the audience is not only the teacher or the student, but also authentic readers. Those who write the syntheses state that, in many cases, they have had to (re)read the scholarship so as to better understand

5 As seen in Appendix I, the *narrative* synthesis puts forward the participants' interventions and structure of ideas in the form of a story about who said what throughout the session. The appendices II and III, on the other hand, show syntheses that are mostly *expositive* because they underscore the ideas discussed, instead of who contributed them. The ideas are organized based on their logic as opposed to the moment in time they were discussed.

what they have worked on in class and to capture in their synthesis an idea that is more comprehensible for the readers (and for themselves). The collective review serves as a model and guided practice that trains for the writing (or rewriting) of the actual exam. The students who voluntarily do the synthesis share that they learn a lot: to write and to understand the contents. One student, a middle-school physics teacher, was enthusiastic about this experience and decided to transfer it to his classroom to "enliven" the students.

As a *reading* task, the synthesis helps link what was worked on in class with what was read in the scholarship, and to recap the topics from the previous class. Students who were present in the recorded session contrast with their own notes and assess what content was the most relevant. If the readers were absent from the recorded session, they obtain information about what was covered in their absence. It also allows the teacher to assess what students understood from what was exposed in the session and to explain and clarify again in case there is a misunderstanding; it also allows the instructor to show in action their criteria for evaluating writing.

Delicate Balance

Below I list a series of dilemmas related to this activity which should be analyzed and considered by the instructor who wishes to carry it out:

- I cannot overlook the fact that this task takes up class time in which no progress is made with new topics. But I must also say that, without a doubt, it is a task that invites the class to take seriously the central content of what is presented by the instructor.
- Since revisions can extend for too long if they are exhaustive, it is the instructor's job to determine the focus of analysis for each synthesis so as to narrow and focus the revision.
- Elaborating a synthesis is very laborious; thus, not all students wish to be involved in writing, though those who do are thankful for it.
- As an instructor, I must devote a considerable amount of time at the beginning of the course to write the first two synthesis; but if I do without it, I deprive the students of necessary models and I diminish their commitment to the task.

Next, I analyze another of the writing assignments posed in my classes.

Tutoring Group Writing

The research paper (*monografía*, in Spanish) is a form of evaluation that has gained popularity in the university. However, the term *research paper* does not

designate a clearly identified textual entity. It has been observed that there is no consensus about what an instructor expects of a research paper; that it is situated between exposition and argumentation, and that the guidelines for its elaboration are often not made explicit to students, whose writing then reflects their own disorientation and inaccurate understanding (implicit and diffuse) of the task. However, it is clear that the research paper is different from a written in-person exam answer, due to its greater length, the ample time that instructors provide for its elaboration, and because it allows the consultation of scholarship during its preparation. In Table 1.2, I delineate the features of a research paper, listing the contents usually included in each part and the functions it fulfills.

Table 1.2 What a Research Paper Usually Is

What is a research paper?

When we say "research paper" it would seem that we refer to a single type of text. In reality, however, instructors conceive of this piece of writing in many different ways and students claim they don't really know what it is (Ciapuscio, 2000). It seems, then, that this term simply designates a written work to be evaluated, of varying length, that must cite sources, and which must be completed outside the limited and controlled time of the classroom. Beyond this, it is not possible to define what a research paper is, but only to point out what it could be. It will be the faculty who, according to their disciplinary and pedagogical interests, will have to specify the meaning of "research paper" that they use when evaluating students.

Though in some contexts the notion of research paper is used in a broad sense (including empirical research projects and analysis of practical experiences), its more general meaning refers to the analysis of scholarship. This is the meaning considered in the table below.

Structurally, there is agreement in conceiving the format and structure of the research paper as composed of an introduction, body, conclusions, and references; the problem emerges when students try to understand what they should write in each of these parts. Uncertainty increases regarding the body of the text, since different disciplines and also different faculty expect students to do something in particular in this section based on disciplinary conventions (Gallardo, 2005). Paradoxically, handbooks that address how to elaborate a research paper are more precise in regards to the introduction and conclusions than the body. For students, this constitutes a source of difficulty, because they do not have criteria to know what to do in the body of the research paper with the knowledge studied, nor how to write about it.

It is useful to point out to students what they have to do with language when writing a research paper. This requires alternating between two enunciative positions: exposition and argumentation (Arnoux et al., 2002). In other words, when writing a research paper, it is necessary to expose and to argue. There is exposition when explaining what the authors consulted have said, and there is argumentation when defending the thesis of the writing (position/idea/statement/answer to the prompt) based on reasons extracted from the analysis of what has been read.

In the following table, I indicate the functions and "textual segments" that the different parts of the research paper usually have, sometimes alternately.[6] Each instructor will be able to think of others. The important thing is to make them explicit in front of the students and, if possible, to show and analyze in class a sample research paper, i.e., a written work that meets the expected characteristics.

Section of the research paper	**Main function**	**Possible textual segments (formulated as instructions to know what to do)**
Introduction	Situate the reader in what they're about to read.	• Announce the objective of the work by presenting the topic. • Specify the problem in the form of a question to which the research paper will provide an answer. • Indicate the corpus of analysis, i.e., the sources (bibliographic and other) that will be used to address the question posed, justifying their selection. • Anticipate the central idea (the answer to the question posed, the main position statement or thesis) that will be supported in the body of the paper. • Outline the structure of the paper, i.e., the order of the subtopics to be dealt with.
Body	Support an idea through the analysis of a group of texts.	• Review a set of bibliographic materials on a topic, not only summarizing what they say but also establishing relationships between them; the product of these relationships should be likely to be synthesized in a statement or thesis about the topic and/or the authors consulted. • Argue in favor of a thesis, giving reasons based on the reviewed bibliography; this argumentation may consist of several sub-arguments linked to each other, in which the (bibliographical) "evidence" to support them is evaluated and may also include the presentation, evaluation and refutation of potential counter-arguments. • Analyze the literature, construct an original question that emerges from this reading and answer it based on the readings.

6 I am following Alazraki et al. (2003), Arnoux et al. (2002), Ciapuscio (2000), Chalmers and Fuller (1996), Chanock (2002), and Coffin et al. (2003).

Body (continued)		• Examine a problem and take a stance based on the literature on the subject. • In all the previous cases, show the reader the reasoning that leads to the position assumed (= the thesis, claim, or answer), reasoning based on what was read, for which the references of the texts mentioned must be included, indicate what the authors say about the problem or question being discussed, compare their ideas (indicate similarities and differences), evaluate the contribution of each text, and state and support the thesis defended against the problem addressed in the research paper, which may include an example or case that illustrates it, or an analogy with another phenomenon.
Conclusions	Create a sense of "closure," finished work.	• Answer the questions provided by the teacher establishing relations between the visited readings. • Synthesize the thesis or central claim of the research paper and the main argument on which it is supported. • Assess what has been previously stated indicating scope and limitations. • Extract implications or elaborate further questions.
References	Show the sources.	• List the bibliography consulted, arranged alphabetically by author's last name and following one of the existing conventions, as specified.

In conclusion, a research paper can be many things. But students need to know what their instructor expects it to be. Let us not take it for granted that they understand what to do when we ask them for a research paper. Let us specify the meaning of what we require, not to restrict the students' "freedom" (we can offer different options) but to free them from their disorientation and confusion.

Finally, a piece of advice on the writing process, for students who read and read and then become terrified in front of the blank page as the due date approaches:

> Do you put off writing anything until you've done all the reading? And then there is too much to deal with, and it's due tomorrow? Instead of that, pause between the readings, and write a paragraph about how the reading you've just finished relates to the question you are working on. That way, you've got something down on paper, and you're ready to notice how the next reading is similar, how it's different, what it adds or what it questions. By the time you have to write a draft, you've done most of the thinking already. (Chanock, 2002, p. 35)

The writing-discussion-rewriting activity that I describe in the section that follows aims to orient students toward the text that they must produce, assist them in the difficulties they face, and make explicit that textual production is a process framed in a rhetorical context. It also offers an alternative to the usual assessment experience, in which students write and receive a numerical grade (and sometimes a comment) only at *the end* of the process, a practice that Leki (1990, as cited in Bailey & Vardi, 1999) describes as a "coroner diagnosing the cause of death."

A Reader that Cooperates Discussing Intermediate Drafts

When the number of students allows it, and as a form of assessment, I propose that students write a literature review in groups of three. As part of the writing assignment, I give them written guidelines for elaboration and the criteria with which I will grade them. But unlike the more usual situation, before turning in the final version, the group meets with me twice for about twenty minutes to discuss their drafts. During these tutoring sessions, I function as an external reader who is critical and committed to improving the text.

Since Bachelor of Science Education students are required to write a senior thesis to graduate, I introduce the writing of these research papers as a *simulation assignment* or practice: students will produce a text *as if it were* the theoretical framework section of their thesis and they will have to present the most relevant concepts of the learning theories that underlie pedagogical practices. In this way, the research paper is oriented towards a defined textual format, and towards an imaginary but precise audience and purpose; that is, it appears framed in a double rhetorical context (the simulation of the thesis, the real evaluation). I explain that their products will be the instrument with which, as a teacher, I will assess their understanding of the contents covered in the class, but that the writing process will serve as an experience for them to begin to build a picture about what writing a thesis requires: a theoretical framework that states the background upon which the problem to be addressed acquires its meaning.

In our first meeting, students consult with an outline of the text they will produce and my work as the instructor is to help them narrow down the topic, define the focus, identify the thesis or central claim, and foresee the relationships between concepts and the structure of the text in the form of sections with subtitles. In order to accomplish this, I pose questions, I propose to make the textual plan explicit, and point out the need to plan what ideas will be the central axis of the work and how they will be organized. In our second meeting, I browse the produced draft, ask the authors to define the main writing problem they face, and make suggestions accordingly, though my suggestion

never loses sight of the selection, hierarchization and organization of the concepts to be included. I highlight the need to create a text that is independent from the prompt and from them as producers, since—I teach—the reader must be able to reconstruct the thinking of the author in their absence through the clues inscribed in the text. I point out problems in the thematic progression[7] that impact the textual cohesion and coherence (conceptual jumps that need to be overcome with connectors, transitional sentences, subtitles, and with repositioning or with the suppression of disruptive notions), I question the relevance of certain parts in relation to the whole, I propose to re-organize some notions, I suggest to cut out others that weaken the text, I teach to use the paragraph as a thematic unit, etc.

The purposes of this pedagogic intervention are to promote the experience that writing is rewriting; to favor the planning and revision of the substantive aspects of the text—its contents and organization—at recurring moments of the process; to provide a procedural model of and external reviewer that observes the text from the perspective of the reader, not the author, so that, little by little, students can internalize it (see Chapter 3, where I develop this idea). Indeed, as instructor, I share with students my own writing experience, and relate that I myself still face the challenges intrinsic to all writing that entails reorganizing what you know in order to make it clearer, more communicable, more substantiated, more solid. Another objective of this assignment is to offer students orientation about what is expected from them as they produce, write, and face the inevitable problems, and not only at the beginning (when they still don't imagine the difficulties) or the end (when "the die is cast").

How is this tutoring received by students? The students report that meeting with an instructor-tutor before handing in their work to the instructor who assesses their work is an unusual but very formative situation for them. It is a mode of evaluation that they appreciate because it is in itself a fertile occasion for learning. The main obstacle to extending this pedagogic practice are over-crowded classrooms and the limited teaching time available to many of the teachers. However, I find the difference between this approach and the habit of requiring a monograph as assessment (group or individual) without any orientation during the process to be substantial. In my experience, the initial work that students hand-in presents multiple problems, and the dilemma between giving them a passing grade without taking those problems into account or failing them is unsolvable to me. For this reason, I only propose

7 The "thematic progression" is the way that a text articulates an idea with the preceding one; in other words, the way that new information relates with information previously given in the text. It is how the topic addressed progresses, the way in which what's being said advances; the chaining of the concepts that are being presented throughout the text.

writing of greater scope than what is required by exam answers when I can take charge of teaching what I expect the final products to contain.

Exam Preparation

The written response to exam questions is one of the most widespread assessment practices in higher education, yet it is not without difficulties. Preparing to be assessed requires more than just studying. As an instructor, I have asked myself how I can help my students to arrive at the exam better prepared and I have included a series of tasks in my lectures that aim at this objective.

List of Questions, Grading Criteria, and Mock Exam

We start working on the exam early in the term. In the course of the weekly activities of "rotating elaboration of class synthesis" and "written answer to questions about the scholarship" (discussed in this chapter), students can become aware of the kind of things I look for as an instructor when grading a paper. In addition, a couple of weeks before the evaluation, students receive an extensive list of potential questions (about thirty), some of which will be the ones they will actually answer on the exam. These questions apply a focus to the reading of the bibliography that differs from the one that students have applied over the semester in preparation for lectures, and which included the help of reading guides that are closer to the texts (see Chapter 2). The exam questions demand a higher level of abstraction and generalization: they require establishing relationships between texts and authors, between the scholarship and the topics developed in class.

One week before the first midterm exam, I conduct a "mock" exam: students answer one of these questions in writing, under the same conditions (length, time, individually) as they will have for the real exam. They are not graded. I consider it a kind of rehearsal of the dynamics of the exam and a review of the doubts that may arise on the topics covered. As they submit their answers, I examine some of them and select those that contain common difficulties or those that exemplify virtues or issues worth commenting on. I read these selected answers to the group of students and propose to analyze them as if we were revising a text in order to improve its content and form. On the blackboard, we collectively construct the text plan of the ideal answer, i.e., we outline the contents and the structure it should have. Then I indicate to the students that I will grade the actual exams the following week, bearing in mind the criteria I showed during this collective review. Finally, I hand out in writing the correction guidelines that I will take into account when evaluating and a model of the ideal answer; the students read them, raise their doubts, and I clarify them.

The purpose of providing a set of questions in advance, from which the actual questions asked in the exam will also come from, is to help organize the study: to limit the infinite number of possible questions and to place the student in the analytic stance or perspective of the teacher. It could be objected that, in this way, students study less: perhaps this is the reason why it is customary to hand out the questions only at the time of the exam. I don't think this way, and neither do students: they say that they study in a different way, with a broad perspective all the same (there are thirty questions that require going back and forth among the texts!); some of them share the task and write the answers as a group. In the real exam they will not be able to use these notes since, in this case, I am proposing a "closed book" approach. What they will use is the knowledge that this reading, writing, and peer commentary have helped them to develop.

For its part, the "mock" situation pursues several objectives. First, it promotes reflection on a central but paradoxical feature of the assessment: the need to write as if they had to report on the topic studied to a reader (instructor) who pretends not to know anything about the topic, although the instructor does have that knowledge.[8] This impacts the selection of content and the planned textual organization. The simulation raises awareness of the need to construct an autonomous text and to control the thematic progression. It also helps students to start studying for the exam earlier than usual, to anticipate the way they will be evaluated (questions they will be asked and grading criteria) in order to be better prepared for what the instructor expects from them, to show their learning and difficulties without receiving a grade, and to take on the role of readers-evaluators during the review phase so that they can take it into account when they write the real exam.

Students value this activity. Studying for a mock exam from a list of questions, putting themselves in the situation of having to write an answer within given time and length constraints, obtaining feedback on the texts produced, observing the instructor's grading criteria in action, and having the exam questions, grading guidelines, and an ideal answer model available in advance all help to reduce students' uncertainty about the forthcoming assessment and diminish their anxiety. Participating in the analysis of peer responses puts the

8 Atienza and López (1996) underscore that evaluative situations do not follow the "cooperative principle" (Grice, 1975) generally taken for granted in communicative exchanges; in these situations, the speaker avoids giving more information than what is necessary for the audience to understand, because they know that the audience can complete their understanding with their own knowledge of what the speaker is taking for granted. This "maxim of quantity" is not valid for evaluative situations, because the goal of these exams is to verify that the student has acquired certain knowledge. However, since students usually rely on this maxim, it is advised that the instructor makes explicit that the maxim does not apply to the evaluation situation and that they teach how to write without adhering to it.

student in the position of reader-reviewer-evaluator and helps them to keep in mind the criteria with which the instructor will grade, but it can also help them to consider the reader's point of view when writing for others. Finally, the instructor receives fewer questions about the grading of the exam because they have already shown the grading criteria and because the students have been able to represent the situation beforehand.

Written Response to a Question About the Scholarship

As I discuss in the following chapter, like writing, reading in higher education is not something that can be taken for granted. There are many different ways of approaching and understanding a text, and the ways of reading specific to higher education imply categories of analysis that incoming students have not acquired. To help students develop them, instructors can intervene by guiding their reading. But we also need to know what students "misunderstand"; that is, in what ways does their comprehension stray away from the limits set by the text and what do we expect as experts in the discipline in which they are newcomers? As instructors, we need the students' divergent interpretations to come to light. Only in this way will we be able to point them out, re-explain and help students find in the text what they have not found on their own. One opportunity with which to find out what students understand when they read is to have them write about what they have read in books. In addition, inviting them to write about what they read contributes to increase their cognitive activity on the text; that is, it requires them to put together a coherent interpretation, to relate what the scholarship says with what they think, and it also requires them to realize what they understand and what they do not understand. This is what studies on universities that have included writing in all subjects have shown, and what a student from such universities expresses:

> When you read something–Okay, you read it and you sort of understand it, but when you actually have to write about it and tell someone else, in writing, it forces your mind to think of it in a new way. You have to organize your thoughts, you have to make it into some sort of order … it forces you to think a lot sharper … it forces you to be even more analytical (Hawaii University Student, as cited in Hilgers et al., 1999, p. 343).

Writing to Understand

Several years ago, when I was a teaching assistant, I implemented a system that largely increased student participation in class. I simply "forced" them to

read.[9] This strategy stemmed from previous experiences that showed that students contribute to class when they understand something about the content being discussed, which usually happens only if they have read the literature containing the notions that the instructor is explaining. The procedure to achieve this is simple, but it requires some organization beforehand: students need to know which texts will be addressed class by class and then it is necessary to provide them with a syllabus of the subject that functions as a work schedule. It is also important to guide them through this document and it is the instructor's task to turn to the syllabus at the end of each class to point out what the assigned reading is for the next class and to what curricular content it is related. However, in order to promote the reading of texts, this indication is not enough. The instructor needs to: a) provide around three questions per text that point to what the students cannot fail to understand (i.e., direct attention to the most important ideas in the literature according to the view of the syllabus of the subject), b) require as mandatory that students answer two of the questions in writing (in 8-12 lines each), and request that their answers be handed in at the beginning of the class in which the texts read will be discussed/explained, c) commit to read, from one week to the next, a sample (four, five) of these answers and make observations on them, and d) at the beginning of the following class, comment on the answers read, point out the most frequent comprehensive difficulties and explain the topics that presented more challenges (topics covered in the previous class and in the scholarship on which the students have written their answers).

With this system, almost everyone comes to class having read the texts that will be discussed and developed. Though they know I will not analyze everyone's answers (but they assume that I will check that everyone has turned them in), they expect that my comments at the beginning of the next class will help in a general way, since the difficulties in understanding the scholarship are recurrent. Week by week, before commenting on the answers received in the previous class, I read aloud a couple of examples without mentioning their author and invite students to discuss their content; I also suggest commenting on the form of expression (if what is said is understood or if it could be said better). My intention is for the students to put themselves in the role of reviewers of their own work. Now, what kinds of observations do I make? While there

9 I implemented this during a first-year course (Psychology and Genetic Epistemology, from the Psychology Department of the Universidad de Buenos Aires). I am grateful for the training received by professors (J. Antonio Castorina, Alicia Lenzi, and Ana María Kaufman), and fellow teaching assistants, when during our weekly meetings they made space to reflect about our teaching practices, in addition to the study of the discipline.

may be numerous problems, I try to help them analyze good as well as bad answers in terms of the understanding of the contents and the way they are expressed (in fact, these two aspects are often intertwined). That is, on the one hand, I read aloud to the group a good answer and I value it because it shows that its author has understood the fundamentals of the concept discussed in the scholarship. Or, I value the written form because it is "considerate" to the reader: the answer is well organized, points to what is being asked and explains what is being requested. On the other hand, I also read aloud answers with problems: I point out comprehension errors and explain the issues at stake (sometimes rereading aloud for everyone the part of the text that has been understood differently from what the professor intended). Moreover, in some cases, I show when an answer assumes content that the reader-instructor indeed has, but that the students, when evaluated, should not leave unexplained. In this way, I make explicit "the contract" of the written evaluation, according to which the student who writes cannot expect their instructor to collaborate in order to understand them, but must show them that they have mastered the topic they are being asked about (as I explain in footnote 8 above). On many occasions, together (orally or on the blackboard), we reformulate the initial answer to adjust it to the parameters of what would be a better answer in terms of its content and discursive formulation.

What do students say about this pedagogic situation that we implement throughout the term? They state that what at the beginning is an obligation becomes a habit of reading class by class. And they are grateful that their teacher reads what they are understanding, takes up the difficulties, explains again, and shows in action their grading criteria. But, mainly, they recognize two facts: that writing about what they have read favors studying in a different way—it requires them to realize what they understand and what they do not understand—and they also notice the difference that emerges with respect to other courses after several sessions and on the occasion of the mid-term exams: in those courses the unread scholarship has accumulated; on the other hand, with this system, they have already had a look at the texts of the course and feel that studying will mean re-reading materials with which they are already familiarized.

Similarities Between the Four Writing Situations

> The rotating elaboration of class synthesis, tutoring for group writing projects, exam rehearsals through a "mock" exam situation, and the writing of reading responses are conceived as situations of coaching and orientation to students as they face

> the task of writing in a subject they have not yet mastered. The dual nature of this steep learning calls for dualfold teaching on the part of instructors in order to help students enter a community of both specialized discourse and knowledge.

The four situations described above share the objective of making the revision of writing necessary, not only in terms of spelling and morphosyntax, but also at the level of ideas and their discursive organization. All four provide the opportunity to share with others the role of reader-reviewer. All four allow the revision of thought and language together, as a way of progressively approaching the concepts and writing of the discipline. Table 1.2 shows the university students' need for their instructors to make revision practices visible: to teach them what to look for in a piece of writing and how to change it if it is judged inadequate. In this sense, the writing activities recounted show a teacher giving feedback on early versions of a text and helping its authors to reconceptualize the content. And, as two Australian instructors point out, "this feedback can only come from the disciplinary insider. It cannot be provided through classes on writing or composition" (Bailey & Vardi, 1999).

The academic tasks analyzed in this chapter are also similar in that they are part of a "conversation" between students and teacher, a dialogue that helps newcomers learn the ways of structuring in writing the knowledge of a discipline according to the canons of the community that practices it. I think that these situations could be examples of students' need to learn to write (and think) "in the language" of the disciplines they study, with the help of interlocutors who master it, as suggested by Chanock:

> Language is acquired through dialogue (Vygotsky, 1978) and our utterances, including the silent ones of thought, are shaped by the experience of *conversation* (Danow, 1991, p. 84). If students are to develop an academic voice, they need opportunities *to try it out with a fluent conversation partner, and preferably a non-threatening one* [emphasis added] (Chanock, 2000, p. 82).

In the following section, by contrast, I address the reasons usually given by disciplinary experts for *not* implementing such practices.

Why Should We *Not* Address Writing in Every Subject?

I know of four arguments that explain why many instructors still don't address their students' writing: a) they have never stopped to think about the

convenience of doing so, b) they don't know how, as they are not specialists, c) they think that addressing student writing would restrict the students' freedom and autonomy, and d) they fear how much time it would take.

For instructors inclined to argument a), this chapter is itself a counterargument. There are at least two reasons that justify starting to take charge of writing in higher education: the fact that there are discipline-specific modes of writing that only an expert in the discipline can convey, and the fact that writing is one of the most powerful means for students to elaborate and appropriate the conceptual content of any subject. The four writing activities proposed in this chapter are also a first range of possibilities on how to start.

For those inclined to objection b), I can assure two things. On the one hand, writing specialists also do not know how to write the contents of each disciplinary field, since there are some conventions (where thought and language converge) that only experts in those disciplines understand fully. On the other hand, writing specialists do not master the subjects about which students have to write, and it would be difficult for them to guide their thinking through the writing of content from disciplines with which they are not familiar. In any case, writing specialists have much to teach us, the teachers of other subjects, but we must know how to ask them the right questions so that their answers are useful to our students.[10]

In my opinion, notion (c) vanishes if we consider that people who are disoriented cannot be free and take into account that we cannot be autonomous while ignoring the rules of the game. Creativity, which some feel is threatened when I suggest guiding writing through clear guidelines, does not usually occur unless there is a framework of certainty in which to feel safe. In turn, autonomy cannot be decreed by biological maturation, nor should it be conceived as a starting point. On the contrary, it is a point of arrival relative to familiarization with the expectations that each discursive community has for its already trained members; university students, on the other hand, are novices and need to learn from their instructors the modes of thought proper to a discipline, and it is through writing that it is possible to guide them towards those.

Lastly, I think it is convenient to subdivide the objection of those who assume position d). Taking charge of students' writing takes time; time that

10 In my case, I come from the psychology of education, and thanks to my colleagues from the Linguistics Institute at the Universidad de Buenos Aires, I started to learn a few years ago what they have to teach. For those who wish to take the same route, I suggest reading Arnoux and colleagues (1998 and 2002). Also you may refer to Adelstein and colleagues (1998 and 1999), and Bas and colleagues (1999).

is taken away from the transmission of disciplinary content, and time that is added to the instructor's workload (to carefully read students' work, and make observations aimed at improving it). Regarding the first part of this objection, I do not think this is a serious critique: though it is true that in class there will be *less lecturing about disciplinary concepts*, without a doubt, students *learn more concepts* altogether, because writing is incorporated in the curriculum and because its incorporation contributes to students appropriating the notions imparted by the instructor, many of which—in the absence of writing—would not have been acquired at all. As for the latter, I have less to say and more to agree with. Helping students to write requires a workload from the instructor that does not exist if this task goes unaddressed (to plan and test writing assignments and, especially, to read and comment on the products written by the students). The only way to deal with this objection is to take the debate to the institutions and fight for a review of instructors' workloads and the number of students per class. A more personal and provisional way out is the one I started a few years ago: I began to engage with writing because I did not want to keep complaining, and because I was bored of always doing the same thing and, mainly, to develop myself as a professional through inquiry into my own innovative practice. I return to several of the themes in this section in Chapter 4.

The Pending Debate in Institutions

In this chapter, I have tried to show that dealing with students' writing in a higher-education course is not a *separate* task from teaching its concepts. On the contrary, it is a way of addressing those concepts: of making sure that they are not only transmitted by the instructor but also appropriated by the students. Constructivist approaches rightly warn that students learn only from their cognitive activity as mediated by the instructor as the representative of the culture. I think that in the previous pages I have shown a way of putting this principle into practice.

I would like to end this chapter by stating one of the challenges that remains open. The experience described in the previous pages has been positively valued by the students who have gone through it: although they acknowledge the demands it places on them, they are also grateful for the opportunities it provides. However, the reality is that this initiative turned out to be an isolated practice that did not transcend the courses in which it was carried out, nor did it have institutional support.

In order to extend this experience to instructors in other subjects that have no practice teaching writing, our institutions face a double challenge: they

must reflect on the value assigned to writing and they must also revise their structures to make place for teaching it. In other words: on the one hand, it is necessary to be aware of the cognitive function that writing plays and acknowledge that this role does not take place spontaneously. Writing as a way to rethink knowledge is not a natural ability but a potentiality that is actualized in certain academic communities through writing situations that allow revision, and in which the writer is aware of their audience. Students need to be guided towards this culture of writing; that is, instructors need to realize that their subjects, whatever they may be, need to reconsider the writing tasks they usually propose: contemplate their recursiveness, institute intermediate readers, and make room for the instructor to *respond* to (and not only grade) what is written by their students (Chapter 3 takes up this idea again).

Now, this reflection does not just concern individual instructors, but also the authorities and governing bodies, which set general objectives as part of their educational policies. Because taking charge of students' writing is not a matter of conceptions and good will only. It requires institutional changes that promote the integration of the teaching of writing in each one of the subjects, that foster collective reflection among instructors across the disciplines and experts in writing and learning, that create resources to guide instructors, that promote forums for discussion and presentation of papers on these issues, that recognize the professional development involved in engaging in academic literacy instruction, and that advocate for the reallocation of the necessary funds.

Despite the prevailing institutional disregard in the circles I frequent, I am partly optimistic because I have met many higher education instructors who are interested in helping their students learn. These instructors have seen for themselves that one way to do this is to intervene in the ways in which the content of their subjects is read and written by students. I hope that this chapter promotes these instructors' reflection, who want to stop worrying and start dealing with their students' writing. And I also hope that the arguments given in these pages will encourage them to raise this pending debate in their institutions.

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Appendix 1. Narrative Synthesis of the First Class, Prepared by the Instructor

Universidad Nacional de Gral. San Martín—BA in Science Education

Theories of Learning **Prof. Dra. Paula C. Carlino**

Synthesis of class 1 (8/7/00)

Getting to know each other: "we are a group of daredevils."

At the beginning of the class, the instructor (hereinafter Paula) wrote on the board the day's work plan:

We started the class with Paula's presentation.

- Introductions.
- Course administration (syllabus, literature, schedule, etc.).
- Small group assignment to reflect about the process of learning.
- Sharing.

Paula Carlino (PhD in psychology) did her doctoral thesis on reading and writing strategies at Universidad Autónoma de Madrid. She is currently a researcher at CONICET and her topic is writing processes in university students. She has been teaching this subject at UNSAM since the first semester of 1997.

Then, all the students introduced themselves and specified their major, the references they had or did not have on the subject, their expectations, and the level at which they teach.

Sebastián M. (Chemistry teacher) does not know what this subject is about, but he hopes that, like all subjects, it will help him to better communicate what he knows. He works in middle school and in 9th grade of high school.

Oscar T. (Physics teacher) is taking Educational Psychology (compulsory in the old study plan). This is his last course, and when he asked about the thesis, a classmate (Juancho) told him that this subject would be useful for him. He teaches middle school and high school. He is a fan of Independiente.[11]

11 Translators' note: "Independiente" is an Argentine soccer team.

Marcela C. (Biology teacher) also took Educational Psychology but "did not get any news." For this subject she has other expectations. She knows that the instructor is very demanding. She teaches in high school, higher education, and in training courses. To graduate, she still has to complete this and another subject; her thesis is on assessment.

José Luis R. (Mathematics teacher) studied Educational Psychology. From this subject, he expects interesting work patterns, high demand, and, at the end of the term, having squeezed every drop of it; that is why he decided to stay when he was offered to take it with another instructor. He works in a math teacher education program, and as a consultant, in middle school and high school.

Paola P. (Biological sciences and chemistry teacher) has no previous references on the course. She is looking to boost the quality of her first college degree, and to her other certification. She teaches high school students and adults.

Patricia L. (Biology teacher) hopes that the subject will help her to improve her teaching. She teaches high school and natural sciences teacher education.

Rosa C. (Natural sciences teacher): "I came to look for answers to questions I've been asking myself since I was a student: how to change education to make studying more enjoyable." She teaches high school students and adults.

Paula O. (Biology teacher) seeks to improve what she does "probingly, by trial and error," to do it with more theoretical knowledge. This subject is covered in the teacher education program, but it is not put into practice: "all this is very theoretical, the reality is different."

Eraldo F. (Natural sciences teacher) is a park ranger and teaches environmental education. He seeks to professionalize his trade, teaching.

Gloria I. (Biology teacher) teaches middle school. She hopes that the course will provide her with new ways to teach.

Marta C. (Biology teacher) wishes that the course will not be merely theoretical, that it can be applied to practice, implemented in the classroom.

Silvana R. (Natural sciences teacher) is a high school teacher. Also she hopes to grow and find something to apply in day-to-day practice.

Julia S. (Chemistry teacher) has no previous references and coincides with the expectations already expressed by others.

Gastón F. (Physics teacher) teaches in high school. About Theories of Learning "I have no expectations"; "the little I know I learned it in introduction to pedagogy and that is still theoretical for me. As theoretical knowledge it's perfect, but it is inapplicable to the reality of the classroom. I would like

this to help me grasp how a student really learns. There're 10.000 theories that don't agree with each other; even when they propose didactic models, they all have good outcomes."

Pablo G. (Chemistry teacher) his expectations are unspecific: he hopes to learn something and take something away. In the past term he loved the courses. He is a high school teacher.

Sandra L. (Mathematics teacher) graduated last year. "I'm fresh." Her expectations are also very broad: to improve the teaching practice. She teaches high school and computing.

Liliana A. (Mathematics teacher) teaches high school. Has "very good references about the course, though it's tough because you have to study a lot." She hopes to improve her teaching practice.

Natalia Z. (Natural sciences teacher) she has been told that this is a good course "you study a lot but learn plenty." She hopes to be able to apply it and use it on the ground, with the kids, to improve the quality of education. She works in high school.

Andrés L. (Natural sciences teacher) teaches high school and middle school students, adults, and in the science club. He has been told that Paula is demanding, but that here you learn how to learn. He hopes to deepen what he learned in "Introduction to Pedagogy": "to illuminate what we have addressed more limitedly."

Mirna P. (Mathematics teacher) teaches high school. Her expectations for this subject coincide with the general ones for the whole degree.

Sergio R. (Mathematics teacher) works 72 hours a week in high school. On Theories of Learning with Paula Carlino, someone told him that "this is a massacre," but he decided to stay with the hope that "what doesn't kill you, makes you stronger"; this confession prompted another classmate to say: "we are a group of daredevils."

Hugo G. (Mathematics teacher) He has no references, but wants the course to help him "stop improvising in the classroom," to find a theoretical framework that will give an account of "where I'm moving and/or allow me to improve my improvisation." In the back of the classroom someone interpreted this musical metaphor with another one: "improvise, but know in which scale you are located: stop playing it by ear."

Claudia S. (Mathematics teacher) comes with "good references: it's one of the most beautiful subjects, you have to study a lot." She teaches in high school.

Mara B. (Mathematics teacher) heard that here: "you work and learn." She hopes to improve her daily work "on a professional level, not only in practice, but to enrich oneself, to learn new things."

Natalia V. (Mathematics teacher) brings the same references. She hopes to have more theoretical knowledge to improve. What she learned in pedagogy has helped her.

Patricia L. (Natural sciences teacher) confesses: "I am just now learning about the modality of this subject, about the demands" (glup). Although she adds, "I think I'm going to like it: I would like to know how the student knows, how what we teach impacts him." She wants to be an education professional. She teaches at the middle school, in high school, and professional development.

Paola C. (Natural sciences teacher) is a teacher of middle school and high school, in an institution in Moreno that is "private"… and "deprived": this is one of the reasons why she started her degree. She wants to increase her theoretical knowledge to see how she can apply it.

Carlos R. (Natural sciences teacher) Works at 7 schools: with high school students and adult students. He signed up for this undergraduate program as personal and professional growth, since when he transitioned to a new high school teaching modality, "the only book circulating in the teachers' lounge was an AVON catalog; either I do something or ... start buying." He hopes to get answers to some of his doubts about learning: "am I failing or what is failing?." He confesses to being the material author of the phrase adopted by others: "what doesn't kill you makes you stronger." He claims to be single.

Marcela G. (Natural sciences teacher) hopes that the course will contribute to the topic of "mental models," a topic she has been introduced to in pedagogy. There she made some incomprehensible readings and she hopes that this course will help her to understand those texts.

Silvia T. (Natural sciences teacher) teaches in high school and dictates teacher development courses at the university level. She participates in a team that "tries to do research in the classroom." She wants to learn how her students learn to see how she can work better. Faced with the comment heard that the teacher is very demanding, she lashes out: "at this point, we don't come to waste our time."

Víctor B. (Biological sciences teacher) has similar expectations to those expressed by his peers. He teaches in high school, middle school, and adults.

At the end of this presentation, Paula contested the idea, implicit in the expectations expressed by several students, that learning theories *directly* serve to modify teaching practices. She argued that the ways of understanding the relationship between psychology and education have been diverse throughout the 20th century, but that it is now known that a teacher does not change their pedagogical practice by adopting a new learning theory. What a teacher does in class is not the sum of the corresponding disciplinary knowledge plus

a theory of learning. On the contrary, a teacher's way of teaching is modified more by the experiences that they had (or have) as a student and by the possibility of observing (and reflecting on) how other teachers teach (observation that occurs by being present in other teachers' classes or through the analysis of videos or written records of classroom activities). However, explicit knowledge of learning theories enables the development of analytical categories, which are necessary to carry out the observation just discussed. Without these categories, things cannot be "seen" because they cannot be given meaning. Therefore, studying learning theories only indirectly can have an impact on one's own teaching practice.

Paula then presented the syllabus for the course. She commented that the classes would focus on the analysis of the required readings, which appears in the syllabus marked with a special icon; each article is preceded by a cover page with a reading guide. The cover page has the function of providing the full bibliographical reference and the reading guide helps guide the analysis of the texts and the subsequent discussion in class.

Finally, the issue of the class start time was discussed and it was decided to start at 6:20 p.m. on time and work until 10 p.m., with an interval of 20 minutes in between.

In the second part of the class, a small group discussion activity was carried out in order to reflect on what learning is and what things are learned. We distinguished different types of things that can be learned and agreed to read Pozo's (1996) text "The learning system" in order to return to this topic in the next class.

Other assigned readings were Pozo's (1993), which offers an overview of the psychology of learning during the twentieth century, and Delval (1994) and Sebastián's (1994), which deal with the behaviorist tradition.

Appendix 2. Expositive Synthesis of the Second Class, Prepared by the Teacher

Universidad Nacional de Gral. San Martín—BA in Science Education

Theories of Learning **Prof. Dra. Paula C. Carlino**

Synthesis of class 2 (8/14/00)

Types of learning and brief history of the ideas on how we learn

The class began when Paula wrote the work plan on the board:

- Pending issues from the previous class's small group activity sharing.
- Reconstruction of Pozo's (1996) article, "The Learning System."

- Conceptions about knowledge throughout history (Pozo, 1993).
- Behaviorist models of learning (Delval, 1994 and Sebastián, 1994). *

*This topic was not discussed and was postponed to the next class.

Based on some issues that remained open from the end of the previous class, we addressed the different taxonomies about learning and went into detail on the one developed by Pozo (1996). According to this author, learning outcomes are not all of the same nature but are sufficiently distinct to constitute different types of learning: behavioral, social, verbal, and procedural. These types can in turn be divided into three subtypes each. The resulting matrix of twelve categories can be understood, for this author, if one considers a graduation from the less to the more explicit and from associative to constructive processes. Paula clarified that she thought Pozo's was heuristically interesting, but, in her opinion, forces concepts to maintain a neat taxonomy. The author's argument is that different types of learning are achieved through different processes, so that the different learning theories would not be mere rival explanations of the same phenomenon but would account for different types of learning.

In addition to these categories of what Pozo calls learning *outcomes*, the author proposes two other axes of analysis: processes and conditions. *Outcomes* refer to what is learned. They can be considered "content" only when learning takes place in an educational institution and is intentionally planned. *Processes* refer to the mechanisms internal to the subject that explain how learning takes place. *Conditions* indicate circumstances external to the subject, provided by the environment (or the teaching context, if there was one) that allow, favor, or hinder the subject to set in motion processes that lead him/her to achieve certain learning outcomes.

The axes and categories proposed by Pozo (1996) will be used to analyze each of the learning theories that we will address throughout the term; we will also examine the definition of learning provided by them, their epistemological affiliation and the behaviors and skills they consider innate.

In the second part of the class, we began to frame the psychological theories of learning developed in the twentieth century within the problem of knowledge posed by Western philosophy.

- A rationalist tradition was observed, starting with Plato —428 to 347 B.C.—(who had as a reference the knowledge of geometry of his time) and continuing, among others, with Descartes —1596 to 1650—.
- Another tradition is the empiricist, which was born with Aristotle—384 a 322 B. C.—(who had in mind his own research, especially in

biology) and continues with the British, Bacon —1561 a 1626—, Locke —1632 a 1704—, and Hume —1711 a 1776—, among others.
- Kant—1724 a 1804–, though he is close to rationalism, he takes into account both currents at the same time and deals with the conditions of human thought that make experience possible (the referent of his theory of knowledge is Newton's work —1642 to 1727—).
- In the twentieth century, emerges a line of research akin to empiricism: Watson's conductism —1878 to 1958—and Guthrie's —1886 to 1956—(theory of classical conditioning) and Thorndike —1874 to 1949—and Skinner's —1904 to 1990—(reinforcement theory or operant conditioning).
- Several authors that we will not cover would be continuators of innatism: Chomsky, Fodor.
- Piagetian constructivism can be related to some of the Kantian concepts, although it also presents differences with them.

Paula's synthesis.

Appendix 3. Expositive Synthesis of the Seventh Class, Prepared by Two Students [12]

Universidad Nacional de Gral. San Martín—BA in Science Education

Theories of Learning **Prof. Dra. Paula C. Carlino**

Synthesis of class 7 (09/25/2000)

[We] adhere [to] Piaget's ideas, but ...
We better study Paula's definitions.®

The class began when Paula wrote the work plan for the class on the board:

1. Appointment of class note-takers.
2. Reading of class synthesis.
3. Pending topics:
   - ✓ Functional invariants: adaptation and organization.
   - ✓ Dialectic between conservation and change.*
   - ✓ Schemes: differentiation and coordination.
   - ✓ Relations between Piaget and Kant.
   - ✓ What does Piaget study.

12 The expressions in between brackets do not belong to the original text, but they were added by the instructor and discussed with the students during the session where the synthesis was read.

- ✓ Model of equilibration: perturbation, regulation, compensation. * * We analyzed the record of the fifth class, which motivated a series of recommendations[,] notably:
- ✓ Good titles anticipate the text, warning [anticipating] the readers about the topic they will read about.
- ✓ The narrative can be written in impersonal singular third person, used frequently in academic and scientific venues, it attempts an objective vocabulary, removed from the reader which makes sentences sound artificial, creating a dense reading. The use of the first person plural, which is more frequent nowadays, makes the reading more agile and pleasant. The use of the first person singular is not recommended [CLARIFY].
- ✓ The comma is a punctuation mark that interrupts the main line of speech [CAREFUL, EXPLAIN AGAIN]. It is a common mistake to use the comma to separate the subject from the predicate or the verb and the direct object, to avoid this we must keep in mind that it indicates short pauses [CAREFUL, EXPLAIN AGAIN] used to:
  - Separate the elements in an enumeration.
  - Insert clarifications and explanations.
  - Indicate the omission of a verb in a sentence.
  - Isolate the vocative.

We decided to leave the revision of the synthesis of the sixth class for the eighth class and we began addressing the pending topics.

Piaget studies how, as subjects, we construct logical norms; mandatory forms of reasoning to which we are subject at certain moments of our lives, and considers them as systems of thought necessary at one moment, but not necessary in another temporally previous explanatory system [CLARIFY]. He also makes, from his epistemological perspective, a parallel between the logical norms and the history of science. In the development of individuals one observes first a period of non-conservation, then an intermediate period in which the individual's implicit theory still prevails [CAREFUL, EXPLAIN AGAIN] and then a period of conservation,[; INSTEAD OF ,] the evidence criteria change.

We agreed, attentive to Paula's suggestions, on different definitions of basic concepts of Piagetian theory.

Schema:® A structured set of action characteristics.® What similar actions have in common that the subject repeats from one action [situation] to another.® Instruments with which the subject understands the world, in other word [s], with what gives it meaning.® Features of the action that tend to be stable, to repeat in the face of a new stimulus; to differentiate, to adjust

to the characteristics of the objects so that from one schema another one can be formed; to be coordinated, when two different schemas tend to function interrelated and compatible with each other, forming a structure.

Functional invariants:® Refers to the functional mechanisms to go from a minor state of knowledge to a later major one; they don't vary throughout the life of an individual.® They are organization and adaptation.

Organization:® Mechanism by which the cognitive system tends to function coherently, avoiding contradictions at any level of development.® Tendency to function as a totality, as a structure where each scheme agrees with the others and functions in solidarity. [Agreement of the thinking with itself.]

Adaptation:® Tendency for every cognitive process to have an instance of assimilation and another of accommodation.® It is the relatively stable equilibrium between assimilation and accommodation.® It is the dialectical relationship between conservation and change, between assimilation and accommodation.

Assimilation:® Transformation of the object according to the subject's schemas.® Active incorporation of the object to the subject's schemas.® Attribution of meaning to what is perceived by the subject according to the schemas into which it is incorporated.

Accommodation:® Action of the object on the subject.® Transformation that the object forces on the subject's action schemas [when the latter attempts to know the former].® Modification of the subject's action schemes according to the peculiarities of the object.

We compared Piaget with Kant, taking into account that the former tried to determine the genesis of the categories of thought of the Kantian subject, if they have always existed or if they undergo a development process. The *a priori* for Kant are the pure forms with which all subjects process reality (formless matter or noumenon), they are conditions of possibility of experience and prior to and independent of it. Piaget refers to two kinds of *a priori*, the *structural* and the *functional*. Structural a priori are the condition of possibility of experience, they are neither prior to nor independent of it, they correspond to the logical schemes and structures of the subject, which we modify throughout our life history according to the interaction with the objects of knowledge. Functional a priori are innate, prior to experience and independent of it, as opposed to structural a priori, they remain constant throughout the life of the subject, they are the functional invariants or mechanisms with which Piaget explains the transition from an initial, lesser state of knowledge to a subsequent, greater one. Regarding the possibility of knowledge, for Kant it is possible as long as the subject applies the categories to reality, objects cannot modify them [For Piaget, on the other hand, the categories progressively

adapt to the object]; for Piaget knowledge is possible through the interaction between the subject and the object, the former applies its schemas and structures (categories) to the latter, both are modified in this relationship of mutual adaptation.

Lastly, Paula presented us with the following integrative conundrum: why do we teachers tend to say that our students ["]do not assimilate a given content["], with the inverse meaning to that used by Piaget [for the term assimilation]?® Because we act with the implicit theories of common sense, as intuitive empiricists and naive realists, considering that students "swallow" without modifying what comes to them from outside, even what we teach them.

Synthesis made by Mafalda and Libertad (in fair tribute to our incentive vicars).

Note: The topics of the plan marked with * were left for the next class.

® Trademark registered by Dr. Paula Carlino.

Reflection

Considering today the contribution of the original publication of this chapter, I see that the book that this chapter belongs to included ideas that questioned the relationship between teaching, learning, writing, and reading in Latin America.[13] It underscored that learning a discipline "consists of a double task: to appropriate the discipline's conceptual-methodological system and also its characteristic discursive practices" (p. 25). It moved away from the traditional complaints of what students do not know; it moved away from the studies of that time that described the mistakes of student texts; it avoided the usual terms "deficit," "defects," or "lack of abilities." Instead, it focused on connecting teaching and what undergraduates do when they read and write in every curricular space. The book presented my experiences and reflections as an undergraduate instructor: it critically analyzed the sessions of a course (Theories of Learning) that was not specifically aimed at teaching reading and writing, but in which students read, wrote, and discussed reading and writing to help understand the disciplinary material. At the same time, it connected

13 *Escribir, leer y aprender en la universidad. Una introducción a la alfabetización académica* consists of an introduction and four chapters: the first one dedicated to writing (translated to English in this publication), the second one to reading, and the third one to assessment—that includes reading and writing. The fourth chapter develops 10 theoretical principles that underlie the three previous chapters. The book was awarded "Best Education Book of the 2005 Edition," has been reprinted eight times, translated into Portuguese, and recently republished in a second, revised edition (2025).

the Spanish-speaking audience to ideas and authors of other latitudes and longitudes that rarely circulated among regional literature. The book also articulated theoretical frameworks from diverse disciplines (psychology, language sciences, rhetorics, pedagogy, language pedagogy) and insisted on the need for a multidisciplinary approach to the questions involved. It did not prioritize theory over practice, but relied on theory to analyze the classroom teaching. These intersections and this focus summoned the readers. I guess that the impact of these ideas also lies in how the book was written: in a style that sought to reach professors from all majors, and not only specialists.

What would I adjust if I were to write the book today? I would distinguish the study practices (reading and writing to study) from professional literacies. I would also redefine the concept "alfabetización académica," as I did in Carlino (2013). Moreover, I would add that the genres from our respective fields of knowledge, which we as instructors want our students to engage with, can foster specialized forms of thinking that go beyond what is typically understood as the "epistemic function" of writing (Carlino, 2023). Lastly, I would include results from GICEOLEM, the research team that I began to lead shortly before publishing the book in 2005: https://sites.google.com/site/giceolem/.

– Paula Carlino

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