Academic Writing Throughout the Undergraduate Years: An Institutional Program

Estela Moyano

This article presents a genre-based pedagogy model for teaching genre in higher education which aims to promote students' literacy in institutional and professional contexts. Designed using a systemic functional linguistics perspective, this genre-based pedagogy seeks to influence knowledge construction in disciplines and empower students to engage in academic, scientific and professional social activities. This paper outlines a program for teaching genre across the second cycle of university curriculum, and the negotiation between participants as a critical tool with which to support students attempts to acclimate themselves to new genre conventions. This institutional program also demonstrates a high degree of commitment on the part of its participants: university authorities, professors of different disciplines and language teachers.

As training grounds for new professionals, universities are not only responsible for the transmission of theoretical and applied knowledge but also for the preparation of students for future action in social spheres that involve the production of new knowledge and the transformation of social and technological processes. In this way, implementing pedagogical proposals that focus on the objective of expanding the possibility of action across social spheres remains a fundamental challenge for institutions of higher education. On the other hand, especially in the context of the democratization of higher education, it is necessary to offer students tools which support their academic development throughout their undergraduate education.

The teaching of reading and writing academic and professional genres is central to theoretical perspectives that conceptualize learning as the expansion of meaning potential (Halliday, 1993) and different social activities as genres involving particular discursive constructions (Martin & Rose, 2008). From a Bakhtinian (Bakhtin, 1985) perspective, a new sphere of human activity will present those who engage in it with the challenge of new discursive

genres to tackle. And these new genres also involve the use of new language which must be learned by students.

At the international level, different proposals developed in diverse theoretical frameworks have given rise to a long tradition of teaching reading and writing based on the concept of genre (Bazerman, Bonini, & Figueiredo, 2009; Hyland, 2002; Hyon, 1996; Karwoski, Gaydeczka & Brito, 2006; Marinkovich & Morán, 1998; McLeod & Soven, 1992; Swales, 1990). Similarly, in Argentina there are courses and workshops that address the need for teaching genres typical of university activity, especially at the beginning of higher education (Carlino, 2006; Padilla, 2007; Pereira & Di Stefano, 2001; UNLu, 2001; Uslenghi, Padilla, & Singstad, 2002). Another related line of research advocates for the need to train students as members of a disciplinary community in which teachers from different disciplines, within the framework of teaching their respective subject matters, incorporate the teaching of disciplinary reading and writing (Carlino, 2005; UNLu, 2001).

At Universidad Nacional de General Sarmiento (UNGS), located in the suburbs of the city of Buenos Aires, the teaching of reading and writing is initiated in two independent curricular spaces: one as a requirement to enter the university (López Casanova, 2009; Pereira, 2006) and the other in the first year of all undergraduate studies (Adelstein & Kugel, 2005). The first of these spaces utilizes the concepts of genre and textual types to address the formal linguistic aspects of scientific disciplinary texts geared towards the general public. The second, based on a multilevel model of textual linguistics, encourages students to read scientific articles from different disciplines, so that they can approach them with the recognition of their disciplinary structure, function and prototypical linguistic traits.

As Parodi (2005) pointed out, in all these applications there is little or no mention of the teaching, from a functional perspective, of the specific uses of linguistic and discursive resources for the construction of meaning in different groups of disciplines. As Halliday and Martin (1993) contended, this is a key limitation of these experiences as it is the linguistic and discursive resources that build the knowledge and ideological foundations on which scientific practices rest. The combination of specific features of the language of science enables theoretical discourse, actively involved in the production of conceptual structures. It is in this way that a scientific theory becomes a linguistic construction of experience different from the one that builds the grammar of everyday discourse. If the students fail to master it, they will also not be able to understand those particular constructions of the world required by scientific disciplines. Moreover, the language of science has spread to other areas, such as bureaucracy or media, making its teaching and learning essential for participation as citizens.

Since students do not receive this kind of training at any educational level, and because of the demand from students, teachers, and academic directors, it has been necessary to generate other spaces at UNGS for the promotion of specialized reading and writing skills. This is how a program that aims to teach not only the structure and contextualization of the new genres that students must address, but also the discursive characteristics that have been developed in different disciplines for knowledge building was designed and implemented. This program is based on the concepts of genre, register, discourse and language of systemic-functional linguistics (SFL) (Halliday & Matthiessen, 2004; Martin, 1992; Martin & Rose, 2007, 2008).

This theory understands language as a complex system organized at different levels or strata which are related to one another through realization. The theory allows subjects to give account of the meaning built in a text and of how this meaning is construed through analyzing the text at all levels, thus highlighting its redundancy between strata. In addition, the stratified model of context allows for an exploration of the relationships between genre and register, and their realization through discourse, as well as the identification and organization in systems of different genres in particular disciplines and cultures. Moreover, this framework provides a characterization of disciplinary discourse (Halliday & Martin, 1993; Martin & Veel, 1998; Wignell, 2007), as well as a theory about the role of language in knowledge building (Christie & Martin, 2007).

We adopted the pedagogical approach developed by the Sydney school (Martin, 1999) with some modifications (Moyano, 2007), that acknowledge Bernstein's influence on explicit teaching and essential understandings related to the redistribution of power through access to discursive resources. This way of working in classrooms does not focus on the formal characterization of genres or speech features, nor on teaching theoretical aspects of the language. Rather, the approach centers its attention on how texts construct relevant meaning in a given social sphere and how through explicit metalinguistic and metacognitive reflection it allows the development of discursive skills in reading and writing practices.

The Reading and Writing Skills Development Program Across the Undergraduate Years (PRODEAC)

The PRODEAC program (in Spanish, *Programa de Desarrollo de Habilidades de Lectura y Escritura a lo largo de la Carrera*) was designed after a lengthy institutional process and received approval from the UNGS' Academic Senate with recurring budget allocation in 2005. Its main pedagogical objective is to

promote the academic performance of students during their undergraduate studies and to prepare them for the professional activities they will carry out in the future. Since academic discourse construction is central to this type of activity, stimulating the development of specialized reading and writing skills is particularly important.

Representatives of the different perspectives of teaching of academic genres observed the importance for more expert members of the disciplinary communities to introduce or initiate students into the practices of the field. This task demands manipulation of the written texts that enable such practices, and thus it requires an expert's knowledge on linguistic discourse analysis, a contribution that can be made by an instructor with a BA in letters. Instead of choosing a single professional to carry out this task,2 we suggested assigning this responsibility to a team formed by both, a disciplinary expert and a language expert, through what was called a 'peer negotiation' process, in which every specialist provides different knowledge that complements each other in order to benefit the teaching process. Joint work involves sharing responsibility for planning, assigning and assessing the proposed written tasks to students as well as the implementation of the pedagogical proposal on which decisions are based. This joint work fosters the content-specific teachers' development of linguistic and genre awareness, and provides knowledge of the context and disciplinary and professional fields to the language instructors. Thus, participants gain increased training opportunities in areas of knowledge that have been outside their specialized path. Throughout this experience, these interactions improve content-specific teachers' ability to guide writing work.

On the other hand, incorporating reading and writing instruction within curricular spaces solves some difficulties posed by complementary workshops. Hyland (2002) points out that in their approach, the writing task is isolated from the activity that gives rise to it and results in a work of 'composition' which mostly focuses on the formal aspects of a type of text. Whereas the work within the content-specific courses involves the design of activities relevant to that particular context; that is, activities that meet the specific demands of the context in which they are carried out.

Moreover, it should be noted that given the amount of required courses of each undergraduate program in Argentina, it is not feasible to add more mandatory courses. As for optional workshops, they are not suitable for at

¹ It should be noted that the so-called 'instructors with a BA in letters' or 'reading and writing instructors' are mostly researchers-teachers from UNGS and a few other instructors with university training and research experience.

² For further discussion of this issue see Moyano (2004a).

least two reasons. On the one hand, it is not only *some* students who require training in this area,³ making it inappropriate to shift the choice to exclusively interested students. On the other hand, many of the students lack the flexibility to add activities to their university studies, as they distribute their time between study and work. Relegating such an important area of learning to a mere option would once again create differences in training based on students' socioeconomic position.

Institutional support has been recognized as a key factor in the implementation of university writing programs (Bazerman, 2007; Carlino, 2005; UNLu, 2001). In the present case, the challenge of incorporating joint work between teachers in two different areas without increasing hours spent on the curriculum has required a strong commitment not only of the immediate actors but of administrators who organize the work in each undergraduate program. This support has also ensured the necessary funding, which allows the program to be extended to all upper division students as part of the development of the graduate's profile.

In order to achieve its objectives, PRODEAC has been organized into recurring activities. Before the start of each semester, the courses in each undergraduate program are selected. These decisions are made together with those responsible for the Academic Training Area of each undergraduate program who use particular criteria for each case.⁴ Once the courses are assigned, instructors are paired up into teams. The team is composed by the content area teacher(s) in charge along with the language instructor. They meet periodically throughout the semester of the intervention to plan, monitor and adjust the process. The language instructors participate in the sessions focused on writing.

Acknowledgment of this need results in the progressive generalization of writing courses offered in graduate degrees or intended for novice professionals and researchers and the fact that external reviewers of university degrees insist on the need to include teaching communicative skills. The genres' specificity in terms of theoretical content implies that their teaching does not correspond to previous educational levels. It should be noted, however, that a first approach to scientific discourse is necessary in primary and secondary educational levels, so that students develop skills to understand and produce texts in the different fields addressed in school. This would also promote access to university and probably the workshops at the beginning of higher education.

⁴ The PRODEAC is part of all the undergraduate degrees taught at UNGS, with the exception of recently created Artistic Languages and Culture, which includes among its faculty numerous instructors in the language area. The degrees that are part of PRODEAC are Industrial and Electromechanical Engineering, BA in Industrial and Political Economics, Public Administration, Social Policies, Education, Political Studies, Communication, Urban Ecology and Urbanism, as well as the Teacher Education Programs of Mathematics, Physics, Philosophy, History and Economics. It should be noted that some of the selected courses are shared by several degrees, which is why they were chosen by the academic leaders of each Institute.

Peer Negotiation Between Partners

The interaction between the linguistics specialist instructors (from now on, the PRODEAC Instructor) and the teacher of the participating course has been called 'negotiation'. This negotiation is an exchange between peers who come together to work toward the shared goal of contributing different knowledge and experiences.

The teacher of the specific content area provides their content knowledge of the field to the negotiation: the one related to the disciplinary domain in question, as well as the academic and professional activities related to this knowledge. As to the degree of awareness in the use of language (linguistic awareness) and genres characteristic of the academic and professional field (genre awareness), there have been documented differences between the participating teachers in the program (Moyano, 2009; Natale, 2007; Natale & Moyano, 2006). Similarly, these teachers are not usually conscious of discourse as constituting social life, so they often consider that type of reflection on texts as completely alien to the program of a course linked to professional activity (Valente et al., 2008).

On the other hand, the PRODEAC Instructor, who lacks the specific knowledge about the disciplines and the professional practices in which the genres in question are framed, must have training for genre descriptions from the linguistic, discursive and contextual analysis that allows to select the contents to be taught, along with a certain degree of specialization in the discourse of science: knowledge of the context where academic and scientific texts are generated and circulate as well as their characteristics, not only in terms of the structure of different genres (Bathia, 1993; Cubo de Severino, 2005; Swales, 1990), but also regarding the particularities of the typical language of this activity (Halliday & Martin, 1993; Wignell, 2007). The PRODEAC Instructor also has pedagogical strategies to teach the reading and writing required by the Program.

Before the work with students begins, the instructors teaching the course negotiate and establish a series of pedagogical agreements. These agreements revolve around the following issues:

• The role writing activities play in the process of learning the course's content knowledge. At this point, it is necessary for the content area teacher in charge to treat the act of writing as an integrated task within the learning content, taking into account, on the one hand, the functions of language and writing in that process, and, on the other hand, their connection to the disciplinary or professional activities. Our experience in the implementation of this Program indicates that when the writing activities are considered 'additional' or 'formal' by teachers or

- students, the objectives pursued will not be achieved.
- Joint planning of the reading and writing activities that the student will carry out within each course. This task should be left to the discretion of the teacher in charge who nevertheless should take into account the contributions that the PRODEAC Instructor can make about, for example, the degree of difficulty in terms of the genre selection and other pedagogical issues related to the writing or to the creation of prompts.
- Description and characterization of the genres that students will produce, including their contextualization, structure, and prototypical discursive and linguistic features. This is one of the key instances in the negotiation process. According to Martin and Rose (2008), the linguist's work within genre instruction is to detect those features that are relevant in a particular cultural domain and describe them across all strata of language and context. In the peer negotiation, the content area teacher—as a member of the disciplinary or professional community in which the student is intended to participate—is the one who selects the genre that students will be asked to compose, and the one who provides sample texts that the PRODEAC Instructor will analyze and later teach to students.

Based on their knowledge of the field of action, the content area teacher can provide key information about the contexts of disciplinary culture, especially when it comes to professional contexts: Who produces the focus texts? Under what conditions? Who is their intended audience? What's the relationship between participants? What type of activity is mediated by the text? What purposes are pursued? This information helps to control the interpretations that the linguist makes from the analysis of the texts and, in a pedagogical way, offers the student a situational framework of reference.

At this point, the role of the PRODEAC Instructor is to analyze the sample texts identified by the content area teacher, usually selected from prestigious publications frequently referenced by the professional community. Some of the chosen genres are selected based on their formal characteristics in specialized journals or institutional forms so they serve as a guide for content organization. These guides may not be enough, however, for those who have to compose these texts for the first time. The genre structure and the function of its parts must be described, along with the discursive organization of each part and some linguistic features, especially in the case of under-studied genres. Thereafter, the most significant features are selected to be taught, including the introduction of multimodal resources (graphics, figures, outlines, etc.), their characteristics, their function, and their relationship to the text. This selection implies that the Program will gradually scaffold relevant discourse features transferable between genres.

In some cases, it was not possible to have texts ready for analysis before the first intervention. In these cases, the peer negotiation revolved around discussing the structure of the text that was to be requested from students. Generally, this type of work has allowed the content area teacher to provide the necessary samples during the following semester of the intervention in the same course, which might indicate an evolution in terms of genre awareness. Another problem is that many professional genres are in part constructed by confidential documents, making it hard to access them. Again, it is the peer negotiation that allows an approximation of genre description in which the linguist displays their expertise by applying linguistic theory to point out regularities in the construction of culturally and disciplinarily situated discourse.

- Planning the interventions of language instructors during the sessions. An ever-present challenge is the decision regarding allocating class-time to writing instruction. Such time should be limited but sufficient and help to achieve the course's goals in relation to the specific undergraduate program. A central issue is the selection of the content to be taught with regards to the characteristics of the genre and the situated discourse, as well as how the pedagogical design will be applied in each particular case. At this point, the responsibility for the proposal to be negotiated must rest with the PRODEAC Instructor.
- Joint elaboration of assessment guidelines that make visible the learning process of disciplinary content and discursive skills. This stage of the negotiation often presents divergent points of view. Based on their own experiences as disciplinary learners, the content-specific instructors tend to consider that the formal features—such as mechanics and graphic design—are the ones that need to be prioritized. But from the theoretical perspective assumed by the PRODEAC Instructor, the focus should be on the functional aspects of the text and, therefore, those related to the construction of register and genre.

It is also necessary to negotiate expectations related to the degree of proximity or distance from the expert texts in order to control the evaluation process. This work—not fully achieved yet—involves the creation of rubrics that define expectations across three dimensions: the use of theoretical or technological information for the applied work, the adequacy of the text to the structure of the genre, and the expected grammatical and discursive features. These expectations will have to be adjusted for different applications in order to evaluate only what has been explicitly taught.

As with any tool that aids writing assessment, there is a risk of mistaking the features of the rubrics as norms. During the instruction session,

precautions should be taken to avoid this from happening. This is especially important because the selected theoretical framework conceives of genres as activities subject to diachronic and synchronic variation, and discursive and linguistic characteristics found with a high degree of frequency in the utterances are features best conceived of as resources, not as norms.

To explore this further, we have been carrying out several diagnostics and follow-ups with students that will hopefully allow us to establish not only the differences from expert texts but also development throughout the teaching process (Giudice, 2009a; Giudice & Moyano, 2009; Giudice, Natale, & Stagnaro, 2008; among others, in preparation as part of the research developed in the Program).

Ultimately, the 'peer-negotiation' protocol provides a space for discussions and agreements over non-traditional ways of teaching reading and writing skills. Reading and writing are seen in this Program as the key to learning disciplinary knowledge that has been textually constructed, as well as the social practices characteristic of the current and future spheres that students inhabit; in brief, as activities that enable social participation in institutional spaces. Thus, peer negotiation is the basis of a teaching process that will expand students' experience and cultural competence as long as they learn to recognize and realize a wider range of contexts, or—following Bernstein's socio-semiotic code theory in relation with the SFL (Christie, 1999)—if they modify the orientation of the code to make it more elaborate, expanding the potential for significance and social participation developed until the moment the process takes place.

Teaching Academic, Scientific, and Professional Genres

During the teaching phase, the PRODEAC Instructor adjusts the pedagogical model to teach reading and writing depending on the situation and university level (see Figure 6.1) that, as already noted, has been adapted from the one proposed by the Sydney school (Martin, 1999). The model proposes a sequence of steps for teaching that involves reading as a starting point for learning writing, then constructing a text as a critical resource for the organization of the task and its product, and, last, editing as a skill of every expert writer. Another goal of the sequence is to increasingly develop the student's autonomy in terms of critical reading and writing that favor the mastery of the available genres as well as the possibility of creating variations according to the needs of student performance. This autonomy will be achieved through joint collaboration between the instructor and the group of students that will gradually lead towards individual work. The instructor guides the task and

seeks to promote learning by explicitly modeling reading and writing, as well as stimulating collaboration between small groups of students so that independent work results from a shared experience.

The negotiation of the discipline and the definition of the context are central aspects of the activity that underlie the whole teaching process. The content area instructor is in charge of negotiating the discipline, since it is related to teaching specific curricular content. Any academic or professional activities that are mediated by texts are also part of the class discussion, and are usually jointly addressed by the co-instructors during the genre description, or by the PRODEAC Instructor until the joint instruction takes place. Context definition involves discussing the purpose of the genre in a specific culture, the roles played by those involved in that social activity, and its relationships with other genres within that field.

It is important to emphasize that there is a consensus among theoretical orientations dealing with the teaching of scientific and academic texts about the need to reflect on the context with students, either for students to become aware of the available rhetorical options that will motivate language choices (Bazerman, 1988; Hyon, 1996), or to make in-classroom writing meaningful (Hyland, 2002). The Program's framework encourages reflection to connect the texts with the cultural context and the goals that guide them, as well as a first approach to the composition of the field, tenor and mode (Martin & Rose, 2008).

Field Negotiation Context Setting	Genre Deconstruction		Joint reading Small group reading Individual reading
	Text Design	Construction of sample genres	 Joint writing Small group writing Individual writing
	Edition of one's own writing		Joint evaluation Small group evaluation Individual evaluation

Figure 6.1 Pedagogical Model for the Teaching of Reading and Writing (Moyano, 2007)

Following that first moment comes the deconstruction stage, which consists of identifying with students both the structure of the genre and the discourse and lexicogrammatical features that the PRODEAC Instructor has selected for the intervention. Again, it is desirable that the co-instructors work together at this point in the process. The topics to be taught address how texts are structured in each genre, how information is usually organized in the different steps of the structure, its function and the relationships between them. If a sample text to deconstruct cannot be found —and, as has already been pointed out, this frequently occurs in the first semester when the program is carried out—the PRODEAC instructors guide students in the joint development of a scheme of genre structure, following the agreements that may have been established among the teaching partners.

When students manage to organize their writing as expected—a goal that requires substantial in-classroom interaction—they have taken an important step towards the appropriation of that genre. However, it is also essential to reflect on the discursive and linguistic resources featured in the deconstructed text, since many of the students' writing problems happen at this level. The task's goal is to promote the awareness of writers' choices from a set of options for constructing meanings in the three metafunctions of language and their contribution to the construction of the register. Thus, the student's understanding of the field increases not only in terms of content but also in terms of the construction of the discipline as a dialogic space inhabited by different positions.

In this instance, under the instructor's guidance the students develop the course's specific reading and learning skills and acquire strategies to approach the texts. On the other hand, they get a relatively clear sense of what is expected from their own production. Even though deconstruction is essential, it is not enough in itself to teach writing, and still requires the fulfillment of the following pedagogical steps.

When we adapted the model to higher education, we had to eliminate the stage of joint writing, with the exception of sessions where specific disciplinary language and discourse features are introduced, and where the learning requires collaborative work. It is essential, on the contrary, to negotiate during the session with students the design of the texts to be produced. An extremely useful activity for students is to discuss writing schemes from their past experiences, especially when they have to produce texts within the framework of genres unfamiliar to them (Giudice, 2009b; Moyano, 2004), or when they are not used to organizing large amounts of information in texts. Moreover, this challenge has also been observed in previous experiences (Moyano, 2000) in graduate students as well as in researchers, and, in this context, the group discussion of textual designs has yielded positive results.

As shown in Figure 6.1, the pedagogical design includes a stage denominated text editing, that is located at the beginning of a collaborative work. This stage, more than a 'correction' in traditional terms, implies a new learning opportunity, where the student is guided to take a step that is usual in the experts' writing production. To perform this task, the instructor and the whole class together deconstruct one of the student's texts, which has been selected as exemplary of a genre from a specific field. Thus, it has been situated in its context and culture, to consider from that perspective whether linguistic and discursive choices are appropriate, taking into account the options that the system offers, and whether the expected schematic structure was achieved in the text, in line with the social expectations of realization of the genre as an activity, emphasizing the functional aspects (Eggins, 1994). In this process, the students will indicate what they consider can be improved in the text and will discuss collaboratively the possible alternatives. In the spirit of the model, the task's goal is to provide students with tools to progressively acquire autonomy at this critical stage of writing and develop transferable learning.

It has not always been possible to implement the collaborative editing of texts in the Program. On the one hand, this practice has been negatively impacted by the available time with the students; on the other hand, many instructors still hold to traditional practices, with the underlying belief that students would benefit more from individual corrections in their writing by the language instructor. However, such work, which could be called 'assisted editing', neither constitutes a learning opportunity nor promotes autonomy.

Assisted editing differs from collaborative editing in terms of the degree of participation of the students and the instructor in the plan to modify the edited text. In assisted editing, it is the instructor who identifies problems in each of the student's texts and suggests the modifications they consider necessary. In the collaborative editing, the whole group and the instructor evaluate a student's text to judge its adequacy and identify aspects that hinder the construction of meaning. In addition, the whole group offers options to solve the problems identified, which are then discussed in the class before being accepted or rejected. In this way, the instructor is modeling and guiding the editing task, so that then, in new collaborative experiences or in small scaffolding groups among peers, the student undertake individual editing with positive results.

It should also be noted that traditional marking or assisted editing requires excessive time for the Program's instructors, especially in cases where the assessment is based on writing and rewriting. In many cases, this task has been carried out via e-mail (Stagnaro, Natale, & Moyano, 2008), which results in a heavy workload for instructors and, consequently, a high institutional cost,

considering that each instructor is in charge of more than one course and that each student completes more than one written piece of at least 15 to 20 pages per semester.

In previous experiences in writing courses near the beginning of the degree program, applying the strategy of moving from a collaborative to an individual editing process yielded outstanding results, not only in the improvement of texts, but also for increasing the autonomy of students (Moyano, 2007).⁵ It is therefore necessary to increase and extend this practice in PRODEAC, by carefully working to implement it so that the program's cost in terms of the time required from each teacher is reduced while simultaneously encouraging students to aim for greater autonomy.

As an additional intervention, at the request of some academic leaders, the implementation of what is often referred to as a "writing center" was included in the Program, namely a space in which students receive advice for the production of the texts requested by their instructors. In the case of PRODEAC, this has been a space to "reinforce" the teaching principles of the program. Attendance was voluntary, in order to make consultations at any time during the composition of the text. Like assisted editing, the resource was costly in terms of instructors' time and did not yield desirable results, with the exception of some isolated cases.

Moreover, the students did not always attend the center, except per instructor's request. When the center replaced the peer negotiation activities, no student attendance was recorded. Thus, it is possible to state that when the content-specific instructor does not participate in collaborative work, their attitude is interpreted by the student as a sign that the academic or professional writing and the disciplinary content are separate types of learning which have different hierarchies.

In light of these experiences, we decided to cease the center and strengthen the class discussion strategies. However, it is possible to think about keeping the center with some modifications, so that it offers a space to work more systematically on aspects related to the language of the disciplines, once they have been discussed during class time, and bearing in mind that it may replicate the workshop work that the PRODEAC Program tried to avoid when it was created. Therefore, it is necessary to emphasize that the process must be carried out following the pedagogical model designed for its application to groups and avoiding individual teaching. It will also be necessary to study how to encourage students' attendance per content-specific instructors; an aspect that will require specific work in terms of the negotiation. Finally, considering

⁵ There is a research-based study underway on the results of this practice at PRODEAC.

the affordances of remote working, the chance to hold it via digital teaching platforms may be explored, if they enable peer scaffolding in group activities.

Assessment of Achieved Goals

Five years after its creation, the goals accomplished in the framework of PRODEAC are related to different critical aspects such as institutional implementation, fulfillment of pedagogical objectives, learning and development of students, design evaluation and improvement of each phase, and in a more general sense, research-based information production.

The implementation conditions in UNGS have allowed, as an institutional achievement, the PRODEAC to expand beyond the six courses that initially participated during the program's first semester, to include between 14 to 20 courses taught per semester during the most recent term, covering all the undergraduate programs offered except for the latest programs created. The institutional commitment determined not only the appropriate execution of the program depending on each department's specificities, but also the creation of new teacher-researchers positions for the Program's faculty. This process increased the number of positions from two to seven in the course of five years. This development also enabled the formation of a group that distributes their time between pedagogical practice and research in order to permanently monitor the Program and develop strategies that improve the intervention, as well as produce specific knowledge on the subject matter. Some of these have led to new research projects, either in the context of UNGS, in collaboration with national and international universities, or in doctoral theses. Finally, to promote the communication of what has been done and in order to generate on-line interaction, a Program website was built.

The students showed improvement in the development of writing skills that can be detected in their texts. Tracing the students' development has highlighted their improvement in the ability to structure texts according to the genre expectations, and an advancement in its discursive construction. While much of the information produced is based on small-number instances per student, it has been observed from following-up students beyond one semester that they develop skills that transfer to new situations (Giudice, 2009a, 2009b; Giudice et al., 2008). They are also able to make requests that reflect growing linguistic awareness, starting with an intuitive first recognition of the difference between expert discourse and the one they produce by themselves.

Achieving autonomy in writing is a difficult task, but students tend to improve in this regard as they navigate their undergraduate years and approach

graduation. On the other hand, there is an increase in student engagement in this process, evident in the attendance to the intervention sessions, consultations and writing-related work.

Throughout their involvement in the Program, the instructors in charge of the content courses developed in terms of their linguistic and generic awareness, a consequence of the peer negotiation space. As for their pedagogical knowledge, they not only reached very strong agreements with their partners, but also achieved increased awareness of the need to teach specialized reading and writing skills, and increased autonomy in decision-making and generation of strategies for teaching genres linked to their courses: they became involved, participated in joint classes and contributed to the improvement of the process, as well as produced changes in terms of writing assessment and in the what they require in the Program. All of these important changes illustrate their increased commitment.

Although the years of experience in this task of the members of the team PRODEAC differ, it can be said that their appropriation of the proposal occurs faster each time. There has been an important development of these agents in conducting the negotiation process with their co-instructors, where each of their contributions enriches the practice and development of the intervention. They also provide a distinctive implementation of every phase of pedagogical design that is shared with the other team members in discussion spaces. These periodic discussions lead to a progressive improvement in implementations, and also serve to illuminate the aspects that require further investigation. On the other hand, thanks to the negotiation between co-instructors, there has been a growing knowledge about situations that are solved by writing within professional spaces, as well as with particular scholarly practices that are specific to each teaching space.

The different research projects that stemmed from the Program have contributed to the advancement of genre descriptions; it has also led to an increasing availability of information about the discursive characteristics of each step of the generic structure, as well as about the language characteristics of disciplines in Spanish.

The Current Challenge

So far, PRODEAC's main focus has been on teaching the schematic structure of the genres that students are asked to write, in addition to teaching some linguistic features, with relative progress in looking at the disciplinary specific discourses. However, it is necessary to develop more activities which consider the problems already identified and that enable more systematic instruction

about the lexical-grammatical and discursive features of genres (Giudice & Moyano, 2009). While there are some previous studies on this topic (Ravelli & Ellis, 2004), there is not enough available information about such initiatives at the undergraduate university level in Spanish.

To move forward in this regard, as Parodi points out (2005), it is essential to have a greater knowledge of the object of instruction, namely, more research is needed on the different academic and professional genres found in different disciplines in Spanish. Since its origin, PRODEAC's goal was to generate a space to advance research that characterizes specialized discourses in Spanish applying the developments of SFL—especially those of Martin and Rose (2007, 2008) used for the analysis of discourse and genre and those on the development of specialized discourse in the sciences and the humanities (Halliday & Martin, 1993; Martin, 2007; Wignell, 2007).

Halliday and Martin observe that the language of science "occupies an extended space, a region whose boundaries are fuzzy and within which there can be considerable internal variation. But it can be defined, and recognized, by certain syndromes, patterns of co-occurrence among features at one or another linguistic level" (1993, p. 4). With regard to the construction of experience (ideational metafunction), Halliday and Martin recognize the formation of taxonomic hierarchies of specific technical lexicon and the use of certain grammatical resources in the formation of genre conventions—such as, for example, very complex nominal groups and clauses constituted as identification or which cause relationships between nominalized processes. These clauses are also combined to construct particular forms of reasoning. Both features (one morphological and the other syntactic) are considered interdependent—different aspects of a single semiotic process: at the lexical-grammatical level, as a syndrome of the feature of the clause; semantically, as a feature of discourse. In this type of analysis, it is not so important to recognize the presence of these resources, but instead how they interact in the text to construct meaning to interpret the knowledge building (field of register).

The particular forms of reasoning to which these authors refer to involve other systems of discourse, especially those that construct textual meanings. Introducing and tracking participants (identification) is often problematic for students, so it is necessary to work to support students' development in this regard. This periodicity is—for those who want to acquire skills to organize information in a text, particularly if it is long and contains abstract content—a critical aspect: the concepts of macro and hyper-Themes and macro and hyper-New are very useful tools for both the understanding and the production of complex texts. Finally, it is important to identify patterns in the construction of the method of development in different parts or sections of the text, as well

as the recognition of "two layers Themes", as it will allow us to understand interactions with other important systems such as voice (Moyano, 2010).

The texts' appraisal should also be a subject of instruction, particularly with regard to the system of engagement (*involucramiento*⁶) used to analyze the rhetorical effects of the combinations of linguistic resources by which an author positions themself against others referred to in the text, as well as with regard to their audience (Martin & White, 2005). It is also interesting to analyze how attitude in writing works, particularly the construction of judgment, graduation and focus on the disciplinary discourse as well as on different stages or sections of the genres which attend to it (Hood & Martin, 2005). In addition to other lexical-grammatical resources at play, it will be of interest to address some interpersonal Themes that have a role in this regard. The resources available in the appraisal system allow us to build the figure of the author and their relationship with readers from an intersubjective perspective, hence the interest in exploring relationships both in the field of science and professional spaces.

The interaction between these aspects of discourse enables the elaboration of the disciplinary field, as well as that of the expected tenor, in terms of both author construction and negotiation of the legitimation of constructed knowledge (Moyano, 2005). In this way, it contributes to the construction of the genre as a particular configuration of the three variables of register.

Finally, it is essential to design teaching materials to support students at this educational level, so that the work on the discursive features outlined before increases in future PRODEAC instances.

Final Comments

This article has presented a program designed with the aim of influencing not only the proper development of students within higher education, but also their future acclimation to professional contexts. These objectives, in line with the theoretical and application principles of SFL on language, culture, learning and knowledge building, have a direct relationship with the students' development of reading and writing skills in new social contexts. Hence its complexity and the relevance of its completion are crucial for social acclimation into institutional contexts.

The program implemented at UNGS is original not only in its design characteristics, but in that it actively involves a number of institutional agents

⁶ The term 'involucramiento' is used to translate 'engagement' into Spanish because it is considered more appropriate than that commonly used 'commitment' to refer to 'intersubjective positioning [linguistic] resources' (Martin & White, 2005).

from different hierarchies and specialties, which has resulted in an unusual degree of institutional support. This has also been achieved because in its founding documents this university recognizes the relevance of pedagogical tools and especially the teaching of language that contributes to instructing students who, for the most part, come from underprivileged social sectors (Corraggio, 1994).

With regards to the accomplishments throughout the five years of its development, it is important to highlight not only those related to the degree of institutionalization in terms of the interest and commitment of those occupying individual or collegiate hierarchical roles, but also in terms of the construction of the joint work of the co-instructors, the progress in students' learning, the enrichment of the Program through the instructors' experiential learning, and via the reflection produced through research. Each of these aspects are critical in themselves, but also in terms of their reciprocal impact.

As has been emphasized, there is still a lot of work to be done. At the moment, the most pressing tasks are: to advance the genre descriptions and understanding of disciplinary discourses in Spanish through research, and to produce teaching materials for students.

References

- Adelstein, A., & Kugel, I. (2005). Los textos académicos en el nivel universitario [Academic texts at the university level]. Universidad Nacional de General Sarmiento
- Bakhtin, M. (1985). Estética de la creación verbal [Aesthetics of verbal creation]. Siglo XXI
- Bhatia, V. (1993). Analysing genre: Language use in professional settings. Longman.
- Bazerman, C. (1988). Shaping written knowledge: The genre and activity of the experimental article in science. The WAC Clearinghouse. https://wacclearinghouse. org/books/landmarks/bazerman-shaping/ (Originally published in 1988 by University of Wisconsin Press)
- Bazerman, C. (2007). Preface. In S. H. Macleod (Ed.), *Writing program administration* (pp. vii-vii). Parlor Press; The WAC Clearinghouse. https://wacclearinghouse.org/docs/books/mcleod_wpa/preface.pdf
- Bazerman, C., Bonini, A. & Figueiredo, D. (Eds.). (2009). Genre in a changing world. The WAC Clearinghouse; Parlor Press. https://doi.org/10.37514/ PER-B.2009.2324
- Carlino, P. (2005). Escribir, leer y aprender en la universidad. Una introducción a la alfabetización académica [Writing, reading, and learning at university: an introduction to academic literacy instruction]. FCE.
- Carlino, P. (Ed.). (2006). *Procesos y prácticas de escritura en la educación superior* [Writing processes and practices in higher education]. Signo & Seña No. 16.

- Christie, F. (Ed.). (1999). *Pedagogy and the shaping of consciousness. Linguistic and social processes*. Continuum.
- Christie, F. & Martin, J. R. (2007). Language, knowledge and pedagogy: Functional linguistic and sociological perspectives. Continuum.
- Coraggio, J. (1994). Reforma pedagógica: Eje de desarrollo de la enseñanza superior. Documentos de Trabajo 1. Estudios de apoyo a la organización de la Universidad Nacional de General Sarmiento [Pedagogical reform: Axis of development of higher education. Work Documents 1. Studies to support the organization of the National University of General Sarmiento]. Universidad Nacional de General Sarmiento
- Cubo de Severino, L. (Coord.). (2005). Los textos de la ciencia. Principales clases del discurso académico-científico [The texts of science. Main classes of academic-scientific discourse]. Communicate.
- Eggins, S. (1994). An introduction to systemic-functional linguistics. Cassell.
- Giudice, J. (2009a). Apropiación por parte de alumnos universitarios de géneros académicos y del tipo de lenguaje propio de las ciencias sociales y humanas: Análisis evolutivo [Appropriation by university students of academic genres and the type of language typical of the social sciences and humanities: Evolutionary analysis]. [Conference presentation] V Congreso ALSFAL. Universidad Nacional de Mar del Plata.
- Giudice, J. (2009b). Implementación del Programa "Desarrollo de habilidades de escritura a lo largo de la carrera" (PRODEAC) en dos materias de la Licenciatura en Economía Industrial: Análisis evolutivo de casos [Implementation of the Program "The Reading and Writing Skills Development Program across the Undergraduate Years" (PRODEAC) in two courses of the Bachelor's Degree in Industrial Economics: Evolutionary Analysis of Cases]. [Conference presentation] Jornada de Intercambio de Experiencias Universitarias en el Desarrollo de Competencias Comunicativas. Universidad Tecnológica Nacional (UTN), Facultad Regional General Pacheco.
- Giudice, J. & Moyano, E. (2009). Grado de apropiación del discurso de las ciencias sociales y humanas por alumnos universitarios: Una evaluación diagnóstica [Degree of appropriation of the discourse of the social and human sciences by university students: A diagnostic evaluation]. [Conference presentation] V Congreso Internacional de la Cátedra Unesco. Instituto Pedagógico de Caracas.
- Giudice, J., Natale, L. & Stagnaro, D. (2008). El proceso de construcción de un estudiante reflexivo. Análisis evolutivo de un caso [The process of building a thoughtful student. Evolutionary analysis of a case]. [Conference presentation] III Congreso Internacional "Transformaciones culturales: Debates de la teoría, la crítica y la lingüística". Facultad de Filosofía y Letras, Universidad de Buenos Aires.
- Halliday, M.A.K. (1993). Towards a language-based theory of learning. *Linguistics and education*, 5(2), 93-116.
- Halliday, M.A.K. & Martin, J. R. (1993). Writing science: Literacy and discursive power. University of Pittsburgh press.

- Halliday, M.A.K. & Matthiessen, C. (2004). *An introduction to functional grammar*. Arnold.
- Hood, S. & Martin, J. R. (2005). Invocación de actitudes: El juego de la gradación de la valoración en el discurso [Invoking attitude: The play of graduation in appraising discourse]. *Revista Signos*, 38(58), 195-220.
- Hyland, K. (2002). Teaching and researching writing. Longman.
- Hyon, S. (1996). Genre in three traditions: Implications for ESL. *TESOL Quarterly*, 30(4), 693-722.
- Karwoski, A., Gaydeczka, B. & Brito, K. (Org.). (2006). *Gêneros textuais: Reflexões e Ensino* [Textual genres: Reflections and Teaching]. Lucerne.
- López Casanova, M. (Coord.). (2009). Los textos y el mundo. Una propuesta integral para talleres de lectura y escritura [Texts and the world. A comprehensive proposal for reading and writing]. Universidad Nacional de General Sarmiento.
- Marinkovich, J. & Morán, P. (1998). La escritura a través del currículum [Writing across the curriculum]. *Revista Signos*, *31*(43), 165-171.
- Martin, J. R. (1992). English text: System and structure. Benjamins.
- Martin, J. R. (1999). Mentoring semogenesis: 'Genre-based' literacy pedagogy. In F. Christie (Ed.), *Pedagogy and the shaping of consciousness. Linguistic and social processes* (pp. 123-155). Continuum.
- Martin, J. R. (2007). Construing knowledge: A functional linguistics perspective. In F. Christie (Ed.), *Pedagogy and the shaping of consciousness. Linguistic and social processes* (pp. 34-64). Continuum.
- Martin, J. R. & Veel, R. (Eds.). (1998). Reading science. Critical and functional perspectives on discourses of science. Routledge.
- Martin, J. R. & White, P. (2005). *The language of evaluation. Appraisal in English.* Palgrave.
- Martin J. R. & Rose, D. (2007). Working with discourse. Meaning beyond the clause. Continuum.
- Martin J. R. & Rose, D. (2008) Genre relations. Mapping culture. Equinox.
- Mc. Leod, S. & Soven, M. (Eds.). (1992). Writing across the curriculum: A guide to developing programs. The WAC Clearinghouse. https://wacclearinghouse.org/books/landmarks/mcleod-soven/ (Originally published in 1992 by Sage)
- Moyano, E. (2000). *Comunicar ciencia. El artículo científico y las presentaciones a congresos* [Communicating science. The scientific article and the conference presentations]. Universidad Nacional de Lomas de Zamora.
- Moyano, E. (2004). La enseñanza de la escritura científico-académica en contextos de pregrado universitario: El caso de la clasificación como micro-género de una entrada de enciclopedia [Teaching scientific-academic writing in undergraduate contexts: the case of classifying an encyclopedia entry as a micro-genre]. In S. Hassan & P. Parra (Eds.), Actas de congreso: La lingüística sistémico-funcional, la lengua y la educación. Universidad Nacional de Cuyo.
- Moyano, E. (2005). Construcción de conocimiento y su legitimación en la sección Discusión del artículo científico [Knowledge building and its legitimacy in the Discussion section of the scientific article] [Conference presentation]. VI

- Congreso de la Asociación Argentina de Semiótica, Facultad de Filosofía y Letras, Universidad de Buenos Aires.
- Moyano, E. (2007). Enseñanza de habilidades discursivas en español en contexto pre-universitario: Una aproximación desde la LSF [Teaching Discursive Skills in Spanish in a Pre-university Context: An Approach from SFL]. *Revista Signos, 40* (65), 573-608.
- Moyano, E. (2009). Negotiating genre: Lecturer's awareness in genre across the curriculum project at the university level. In C. Bazerman, A. Bonini & D. Figueiredo (Eds.), *Genre in a changing world* (pp. 442-464). The WAC Clearinghouse; Parlor Press. https://doi.org/10.37514/PER-B.2009.2324.2.22
- Moyano, E. (2010). El sistema de Tema en español: una mirada discursiva sobre una cuestión controvertida [The Spanish Theme system: a discursive look at a controversial issue]. In E. Ghio & M. D. Fernández (Eds.), *El discurso en español y portugués: Estudios desde una perspectiva sistémico-funcional* (pp. 39-87). Universidad Nacional del Litoral.
- Natale, L. (2007). ¿Conciencia genérica en profesores universitarios? [Generic awareness in university professors?][Conference presentation] III Congreso de la Asociación de Lingüística Sistémico-Funcional de América Latina, Benemérita Universidad Autónoma de Puebla.
- Natale, L. & Moyano, E. (2006). Evolución de las conceptualizaciones sobre el lenguaje escrito como herramienta para el aprendizaje en algunos profesores de materias universitarias [Evolution of conceptualizations about written language as a learning tool of some professors of university courses]. In A. M. Rodi & M. Casco (Coord.), Lengua-Investigación. Actas Primer Congreso Nacional "Leer, Escribir y Hablar Hoy". Universidad Nacional del Centro de la Provincia de Buenos Aires.
- Padilla, C. (2007). ¿Enseñar a argumentar en la universidad? ¿Por qué y para qué? [Teaching argumentation at the university: Why and for what purpose?] In Proceedings Primeras Jornadas Latinoamericanas de Lectura y Escritura. Lecturas y escrituras críticas: Perspectivas múltiples
- Parodi, G. (2005). Discurso especializado e instituciones formadoras: Encuentro entre lingüística e informática [Specialized discourse and educational institutions: The intersection of linguistics and computer science]. In G. Parodi (Ed.), *Discurso especializado e instituciones formadoras* (pp. 15-40). Ediciones Universitarias de Valparaíso.
- Pereira, M. (Coord.). (2006). *La comunicación escrita en el inicio de los estudios superiores* [Written communication at the beginning of higher education.] Universidad Nacional de General Sarmiento.
- Pereira, M. & di Stefano, M. (2001). Diseño curricular del Taller de Lectura y Escritura universitario. La lectura y la escritura como procesos y como prácticas [Curriculum design of the University Reading and Writing workshop: Reading and writing as processes and practices]. [Conference presentation]. XIXº Congreso AESLA, Universidad de León.
- Ravelli, L. & Ellis, R. (Eds.). (2004). *Analyzing academic writing: Contextualized frameworks*. Continuum.

- Stagnaro, D., Natale, L. & Moyano, E. (2008). Tutoría vía e-mail: Dispositivo de un programa de enseñanza de escritura académica en lengua materna [Email tutoring: a device in a native language academic writing instruction program]. [Conference presentation] 4º Congreso ALSFAL, Universidad Federal de Santa Catarina.
- Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge university press.
- UNLu, (2001). *La lectura y escritura como prácticas académicas universitarias* [Reading and writing as university academic practices].
- Uslenghi, M., Padilla, C. & Sigstad, M. (Eds.). (2002). Textos de especialidad: Problemas y propuestas para la Universidad [Specialized Texts: Issues and Proposals for the University]. *RILL*, 15.
- Valente, E., Cusolito, F., Ramirez, O., Abrevaya, C. & Moyano, E. (2008). Un programa de enseñanza de la escritura en las carreras de ingeniería en la UNGS. Análisis de la experiencia con la materia Desarrollo de Productos [A program for teaching writing in engineering degrees at UNGS: Analysis of the experience with the Product Development course]. [Conference presentation] VI Congreso Argentino de Enseñanza de la Ingeniería (CAEDI).
- Wignell, P. (2007). On the discourse of social science. Charles Darwin University Press.

Reflection

The article "Academic Writing Throughout the Undergraduate Years: An Institutional Program" was written in Buenos Aires in September 2009. At that time, the program had been installed for five years in the second segment of the different degrees offered at Universidad Nacional de General Sarmiento.

I think that the article can be considered influential because it gives an account of the first writing across the curriculum program (WAC) in Latin America. The paper formulates an educational problem and proposes a solution which was original at that time. The proposal combines resources of two different trends: Writing across the curriculum (WAC) and systemic functional linguistics (SFL). It proposes to establish a program across the curriculum based on an adapted version of the genre-based pedagogy generated by the so-called Sydney school that applied SFL in the analysis of the texts that instantiated the genres selected to be taught. Unfortunately, there was not enough space to explain how to do this analysis, but this topic has been discussed in other papers published after this one.

The paper also sketches an idea for a research program, suggesting different lines of inquiry: the description of genres and macrogenres to be taught, taking into account previous research on analyzing discourse and on the features of the language of the disciplines; the results of a program in different aspects, including the evolution of the students in writing; and aspects related to the institutionalization of the program.

During more than a decade, many aspects of the program were re-elaborated in other initiatives in two institutions—Universidad de Flores and Universidad Nacional Guillermo Brown, e.g. the extension of the program from the first year through the last year, increasing institutionalization. These innovations have been published or are in process of publication, as well as different aspects of the research program proposed (e.g., Moyano, 2023, 2024).

Other publications authored by various researchers that work particularly in the last two institutions mentioned give accounts of the changes applied in the new versions of the program described, as well as applications in different experiences of teaching genres in those contexts. In some presentations in scientific events, results of these experiences have been shown and commented on. In a subsequent article (Moyano, 2017), I reflected on principles and strategies to consider when creating WAC programs. Many of these aspects had been unexamined in the article translated here. The newer article was published in 2017, but I still think that there are some aspects in which more reflection is needed. There is a long way ahead to improve the proposal and to communicate different aspects of the research in progress. So we will keep working!!!

- Estela Inés Moyano

References

Moyano, E. (2017). Diseño e implementación de programas de lectura y escritura en el nivel universitario: principios y estrategias [Design and implementation of reading and writing programs at the university level: Principles and strategies]. *Lenguas Modernas*, 50, 47-72.

Moyano, E. (2023). A WAC/WID experience in Argentina: Working for a high degree of institutionalization. In M. J. Kelly, H. Falconer, C. L. González, & J. Dahlman (Eds.), *Adapting the past to reimagine possible futures: Celebrating and critiquing WAC at 50* (pp. 205-218). The WAC Clearinghouse. https://doi.org/10.37514/PER-B.2023.1947.2.14

Moyano, E. (2024). Diseño de instrumentos para la evaluación de textos producidos por estudiantes en el marco de programas de lectura y escritura académicas y profesionales [Design of instruments for evaluating texts produced by students within academic and professional reading and writing programs]. *Revista Latinoamericana de Estudios de la Escritura*, 1(1), 99-122. https://doi.org/10.37514/RLE-J.2024.1.1.06