## WRITING PROCESSES, REMOTE TEACHING AND PROBLEM-BASED LEARNING FOR THE PRODUCTION OF ACADEMIC TEXTS

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#### ABSTRACT

The teaching of writing needs to be in tune with real and contextualized practices that allow students to have purpose in what they write. Gone are the practices where writing was done without any intention. In this particular case, the purpose of this essay is to offer a methodology for teaching academic writing based on Problem-Based Learning (PBL). To achieve this, we resorted to the review of sources on writing, academic writing, PBL and proceeded to design a strategy that links the above mentioned, with the contribution of the contextualization of the issues to be analyzed derived from the Sustainable Development Goals (SDGs) and that can be applied in remote teaching conditions, given the event of isolation by COVID-19. In this sense, it is considered a complete and robust strategy that can be used by other teachers in their classrooms to strengthen the development of genuine writing processes and the production of highly complex texts, which contributes to the appropriation of writing skills, as well as disciplinary and interdisciplinary learning on the part of students.

Keywords: Writing; Problem-Based Learning; Writing Processes; Academic Text; Remote Teaching.

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## **INTRODUCTION**

Academic writing has demands that make the performance of students in universities more complex. Especially, if we consider that, depending on their origin, they arrive with great deficiencies in reading and writing. For this reason, most institutions teach courses oriented towards comprehensive training that serve to introduce the student to the demands of the higher level and strengthen language skills to face the academic practices of university reading and writing that differ (Bigi, Garcia & Chacon, 2018), in the way they work in basic and middle school education.

As is well known, difficulties in writing affect students in their performance, since they limit the expressive richness, the communicability of ideas, as well as the appropriation of knowledge and the possibilities of becoming a constructor of their own learning, given the epistemic potential of writing (Rosales and Vazquez, 1999; Miras, 2000; Carlino, 2006; Serrano, 2014 and Navarro, 2018).

However, it is not such a simple problem as it has been attempted to address from didactics by qualifying it as faults or errors, which is currently considered a traditional approach to teaching that ignores the processes of appropriation of written language and the formulation of linguistic hypotheses (Jimenez & Lorenzo, 2018). Further, it is the evidence of deficient and infrequent reading processes that they bring from school and high school, to which is added the scarce real performance of authentic writing that enables the appropriation of the linguistic structure that in turn determines the way in which knowledge is constructed.

On the other hand, the incursion of digital technology in all areas of life imposes a renewal of teaching that is adapted to the current demands of knowledge and to the needs and concerns of students. But, following Cassany (2021), it is not a question of an attachment of digitized materials in the work platform, but it must mean a true conscious and ethical use of them with naturalness and criticality.

Considering that during the Covid-19 pandemic it was necessary to incorporate ICT immediately, something improvised and urgent; it was necessary to urgently rethink how the subject of writing was being worked on. Consequently, it is proposed to create a proposal that allows the development of writing practices focused on the processual cognitive model of Flower and Hayes (1996); the orientation of the same to a problematic and disciplinary situation (Carlino,2005, 2007, 2013; Navarro, 2018), under the methodology of Problem Based Learning PBL and the incorporation of digital tools that enhance the processes of

literacy and encourage the active performance of the student.

Thus, the present paper proposes a working methodology of academic writing practices, supported by the ABP methodology adapted to the current needs of remote learning and virtual learning.

## LITERATURE REVIEW

## Academic writing

Academic writing is considered a demanding, systematic and complex activity. Scientific progress depends mostly on it, which is based on the research developed within university faculties and disseminated in congresses and scientific journals:

Academic writing includes both the works produced by university students and those produced in the academy for the dissemination of scientific knowledge. But we should also include among them (without the label of academic) those other writings that, without an exclusive academic purpose, can improve our competencies as individuals and as students (e.g., reflection through journals; creativity through free papers; poetry as a development of aesthetic sensibility; etc.) (Côrte Vitoria, 2018, p. 97).

Writing requires a recursive process (Cassany, Luna & Sanz, 2007) that begins with the generation of ideas, consultation of sources, establishment of the writing plan, writing, and finally, revision and rewriting. However, writing has not always been worked from didactics in this way. Most of the traditional approaches, such as the grammatical approach, recognized the final product as valid, regardless of the intermediate difficulties and the possibilities for improvement derived from revision.

As for the academic text itself, the difference between "academic" and non-academic is based on very specific and inherent aspects of the writing itself:

(a) the addressee of the text, who is, by antonomasia, an expert in the subject matter;(b) the prior documentary review, hence the specific use of citations, references and use of standards for both; and (c) the context of use and dissemination, which is generally constricted to the academy itself.

Fortunately, just as didactics has changed, so has the way in which the academy today sees the student as a producer of texts. Consequently, to say that student texts such as essays, essay-type exams, projects, reports, dissertations, term papers or others are academic texts is

a relatively recent consideration (Cassany, et al, ob.cit) that seeks not only to appropriate and empower young people in the academic culture, but also to recognize that, epistemologically, it generates knowledge:

...writing is considered as an epistemology, a form of learning, something that has effects on the subject's consciousness, to the extent that it restructures and dimensions it in dynamics that have to do with the evaluation of what the subject knows and does not know (Marinkovich & Cordova, 2014).

It is also a priority to attend to the audience, since the focus on these aspects from the beginning with the students contributes to the generation of an awareness of a professional immersed in a discipline that not only expects from him a mechanical executor, but from there, transforms the knowledge and this is an important process to guide them towards the educational achievement where they will write constantly.

### Writing processes

There has been extensive research on writing processes; however, didactics insists on this approach due to the effective results it has shown. This work proposal based on PBL to produce academic texts is not exclusively procedural, but of a mixed type. It should be noted that the conscious execution of the processes directly influences the production of texts with the textuality standards mentioned by Beaugrande and Dressler (1997).

In accordance with the above, it can be affirmed that one of the weaknesses that is continuously appreciated in the groups is the absence of these practices. Students behave as inexperienced: they write on the basis of a single referential consultation or dispense with it without having a deep knowledge of the subject, they do not plan the text and even less revise it. But, those who are expert writers, recognize that....

Academic writing can be summarized as follows: it is a continuous exercise of unveiling oneself, of knowing oneself, of discovering oneself, of surprising oneself, of committing oneself, of assuming oneself first as oneself, then as a being in relation to others; it is writing, rewriting, elaborating, reworking, outlining, correcting, self-correcting, annotating, reading, rereading, doing, redoing (Côrte Vitoria, 2018, p. 24).

Thus, it is a priority to internalize the processual culture in writing and the value of drafting.

### **Problem-based Learning**

Problem-Based Learning, better known as PBL, is a strategy that already has an important roots in university pedagogical practices. Arenas, Giraldo and Gomez (2021) emphasize that this methodology incorporates "active learning methodologies for the benefit of the student as the central axis of the formative process, making the interaction with knowledge more experiential and collaborative." (p. 201).

It is interesting to highlight some specific aspects: PBL requires students to get involved and define a self-directed training scenario, i.e., the training is not centered neither on the contents nor on the teacher (Wood, 2003:329; Manzanares Moya, 2010:20 and Manahel, Almulhem & Almulhem, 2022:2). In addition, it is considered active because it offers dynamicity, since learning is student-centered through small groups where the teacher acts as a facilitator of the process. In this way, it combines very well with procedural writing because, starting from the problem, learning is focused on problem-solving skills and writing processes occur naturally, with explicit purposes and goals, and not as an artificial action in the classroom.

## **Remote academic writing practices**

The Covid19 pandemic forced remote work. In search of truly incorporating digital tools, it is proposed to complement synchronous sessions and online counseling with various resources such as: the applications provided by the Moodle platform (lessons, survey, portfolio, forums, gamification, questionnaires and the possibilities of sharing links and documents). Or, through other applications such as Classroom where you can upload documents to work on them online, share the evaluation through the design of rubrics, make comments.

Likewise, it is possible to take advantage of digital repositories, library resources by subscription, what has been produced by other institutions that are of excellent quality such as tutorials, lectures, tutorials, among others. All this allows the work of the remote class to focus on discussions about the problem and for orientations and revisions of the productions.

The greatest difficulty of remote work lies in that the teacher must be digitally competent to produce content and evaluate the quality of other authors that he brings to his class so as not to diminish the quality and demand. Likewise, in many cases, they must be willing to develop m-learning strategies, especially when their group of students are of limited resources or have little access to broadband connection.

# METHODOLOGICAL PROPOSAL OF THE STRATEGY

## Stage 1. Input characterization of writing skills

As in any teaching process, it is a priority, in the first place, to make the input characterization where the teacher can show the strengths and weaknesses and use this information as a basis for planning. For this purpose, two basic instruments are proposed: a writing test and a focused interview (Merton, Fiske & Kendall, 1998).

First, the writing test should be applied. For this purpose, it is proposed to adopt the model used by the ICFES (2020), in which a small context with a problematic situation of a current topic is posed, followed by a question to which the student must respond in a short text (between 200 and 300 words), of an argumentative nature. This text must be evaluated with a rubric, which will be explained later.

In the case of the interview, it is recommended to apply it after the test, so that the results are confronted with the questions in small groups of 4 and 5 students. In this way, greater use is made of the information generated by word of mouth and there is an opportunity to ask new questions. For this purpose, the aforementioned survey can be used as a starting point, since it makes it possible to recognize the knowledge and practices of the writing processes used by the students. However, the use of this would serve as a guide, but it should not be strict because everything will depend on the results of the test and the students' answers.

## Stage 2. Contextualization of the problem situation and disciplinary adaptation.

For some years now, writing has been working from situated practices and focused on the development of texts that generate learning, abandoning the old artificial, fragmented and decontextualized didactics (Cano and Vottero, 2018, pp. 64-65). Therefore, it is sought that the writing processes acquire meaning in such a way that they generate significant learning where the student exercises an active and autonomous role.

In this sense, the proposal is elaborated by triangulating three elements: processual writing, the ABP methodology, the Sustainable Development Goals (SDGs) that provide a vision of reality focused on problems of priority interest for the region, and the identity factor of each program.

## **Stage 3. Application of the PBA Phases**

a) Brainstorming: the starting point is the reading and discussion of the information contained in the UN website, but additionally, the teacher can locate a related

text in the news so that the student evidences the situation in his/her country or locality because this generates empathy given the previous empirical knowledge and identification with the situation.

- b) Elaboration of the problem question: this is the guiding question of the work. For this, explanatory material and a tutorial uploaded on YouTube has been prepared and is mentioned in the references and is part of the digitization of information for the remote courses. This guides them on how to write the PP.
- c) Information search: academic writing work requires substantial documentation of information related to the problem. In this case, teachers should provide guidance on how to do it, where to look, what are the selection criteria, the treatment of the information, and the incorporation of that information into the text itself. This phase should be complemented with guiding digital content (infographics and videos) because it is an individual and autonomous process.

The systematization of the information collected can be done in an Excel template that allows them to have everything organized for writing purposes. The documentary review can be done using the Moodle tool called portfolio, or the teacher can create shared folders for this purpose.

## Stage 4. Planning, writing, re-writing and publishing the text.

The pre-writing processes, if properly executed, ensure the success of the written production. The student must be trained to adopt these practices and incorporate them into his/ her academic life as something natural. At this level, the subprocesses can be categorized into those of a high level of complexity and those of a basic level or those that imply mechanical reproduction actions.

Complexity of writing purposes	
Basic complexity	
Selection of the textual typology	
Text Features	
Textual modeling	

Table 1.Complexity of writing purpose

Source: Own elaboration, 2022

The purpose is directly related to the episteme of writing (Carlino, 2004, p. 323). When a person writes, according to Scardamalia & Bereiter, (2014) can *"Say knowledge and*"

*transform knowledge*"; then, there is a type of writing that is done to reproduce knowledge and this is what students normally do to fulfill academic obligations. And, the one that is done to produce knowledge; which requires appropriation and theoretical, thematic and textual mastery to transform that knowledge and make their own contributions from their own conception.

It is in this second case when we speak of the complexity of writing. The student must set a purpose related to what he/she wishes to contribute, generate his/her own ideas based on his/her previous knowledge, select what is most appropriate to his/her purpose, organize, search for relevant information to support his/her ideas and adapt the discursive forms to the audience.

Therefore, Carlino (ob.cit) states that it is the epistemic potential of writing that students waste because they are more concerned with complying with the teacher's demands than with learning to produce knowledge. In this sense, text planning is fundamental: students must elaborate the textual plan, which can be done through a concept map with the Cmaptools tool, available free of charge. This plan should be reinforced in a synchronous session where the teacher and classmates contribute ideas for improvement. With the recommendations, each group should start writing.

Preferably, the text will obey the expository typology and the structure will preserve the model of beginning, development and closing for being the one that predominates in the scientific-academic discourse (Canon & Rzonzew, 2019: 161). Emphasis should be made during the process, the qualities of the expository, as Bigi, Garcia, & Chacon (2019) make explicit:

...the essential objective of the expository text is to show in detail the nature of the subject, problem or object of analysis, using essential "discursive structural parameters" (...). Therefore, learning to write each of these subtypes demands the teaching of procedures by teachers, so that students recognize the main elements that compose them. (p. 37).

However, it is essential to establish its criteria. For this case it is proposed: a) the text is an own creation with significant contributions both in the understanding and appropriation of the problem from the disciplinary field and in the contribution of solutions to it; b) the text is made based on a methodical, systematic review of reliable sources; c) it must include quotes according to APA standards with their respective list of references; d) it is of an expository nature, since they must explain the problem based on the consultations, but oriented to an argued discussion in the search for solutions and a critical stance in the face of social reality.

Next comes the most complex phase: revision and, if necessary, rewriting. Revision constitutes the core of the writing process because it is where the writer contrasts the initial proposal and the scope of what has been developed in order to reformulate or conclude the text. There are different theoretical proposals on revision; most of them analyze how revision has a metacognitive power to rethink and evaluate what has been done, in which what has been produced is confronted with the disciplinary and discursive knowledge, as well as with the conventions of writing and with the writer's initial purposes.

For the student, as Sanchez and Flores (2020) point out, it requires "*retaking, improving, transforming, or even completely rewriting in another way, different from the first version*" (p. 29). Therefore, it is the least frequent subprocess in inexperienced writers because it requires training and knowledge of how texts work and students find it difficult to separate themselves from the initial text; others do not do it and believe that the teacher will not notice it or reject the observations because they think it is foolishness on the part of the teacher.

#### Stage 5. Evaluation of the academic texts

The evaluation is done with a rubric. For the creation of the rubric, the following criteria are proposed to be taken into account:

## (a) Adequacy to the textual typology.

This is directly related to the superstructure of expository texts of the report type.

## b) Quality of the exposition

Expository texts respond to a very particular type of discourse: "An expository text is one whose purpose is to transmit, expose and explain information, by someone who knows a subject, to those who want to know about it" (Garcia Parejo, 2011). (Garcia Parejo, 2011). Consequently, it is considered an artificial genre that is developed through teaching, which is why it becomes relevant, according to Alarcon & Pinto (2018):

...exposition would belong to the secondary genres, due to the fact that they are developed in more complex cultural situations, which pose the need to master varied aspects of organization and expression of the language, typical of formal cultural contexts such as academic, professional and labor contexts. (p. 5)

Thus, discursive appropriation can be a progressive process, according to academic demands and exposure to writing. On the other hand, the writer must pay attention to the information to be presented, for which scientific-technical rigor prevails, the use of terminology associated with the discipline and subject matter, the exclusion of the discursive self and the author's opinions or considerations. Likewise, the presentation must evidence the appropriation of the subject matter, the depth and relevance of the information.

### c) Progress and thematic coherence

The persistence of inconsistencies derives from two situations anchored to the process: the revision and the formulation of the initial purpose.

### d) Paragraph organization and cohesion.

This can be worked on through OVA exercises and gamification to help internalize the linguistic aspects of cohesion and then compare them with the students' texts.

## e) Use of quotations from different sources

During the writing process, it should be explained to them how to make the quotations and review the drafts to see if it meets the requirements, the teacher should establish the types of quotations.

## f) Quality of information

The quality of the information is related to the thematic sufficiency, the relevance of the information presented, the textual purpose (what is wanted, how it is wanted and for whom it is produced), the novel contributions to the topic, the relevance of the information cited and the coherence between objectives and solutions.

## g) Plagiarism

This point is related to incompetent practices of knowledge production, to ethical laxity. However, knowing how to deal with shortcomings and drawbacks, the teacher can take advantage of the situation to guide and improve the processes.

## h) Formal aspects: punctuation and spelling

As Cassany (Cassany, 1997) says, spelling is the epidermis of writing. It is what is most easily perceived. And at this point it is important to be clear, although some errors are part of the process, there must be the conviction to work to improve.

## CONCLUSIONS

Academic writing is a long road that brings the student many benefits: discipline, awareness, knowledge, self-regulation, among others. But, at the same time, it is hard work and requires a great deal of commitment from teachers and students. It requires permanent revision by the teacher and takes a lot of time, especially when the groups are large. Likewise, it is a shock for students in their first semesters who are used to copy-and-paste conceptual work that they can locate in a single book; on the contrary, with this methodology, it raises awareness of the importance of learning to write academically and insists on revision as the only way to improve.

It is also important to note the difficulties faced in the process because they directly affect both the process itself and the results. These may be: large groups that limit the time of personalized attention and frequency; the indisposition of some students rooted in old practices of knowledge reproduction, coupled with the shortcomings in reading and writing. However, the evidence of progress is very satisfactory.

On the other hand, the use of an active methodology such as Problem Based Learning (PBL) brings richness to the learning process because it is not limited to the work of language didactics exclusively, but is based on a real process of appropriation and production of knowledge. In this sense, the strategy also encourages critical reading, socialized discussions in the style of learning communities, the production of knowledge and meaningful learning. It requires commitment and passion from the student and attention and willingness to interact from the teacher.

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