GUIDED USE OF WRITING PROMPTS To improve academic writing in college students*

EL USO GUIADO DE PAUTAS PARA MEJORAR LA Escritura académica de los estudiantes Universitarios

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Abstract

The paper presents empirical data supporting the hypothesis that the systematic and guided use of academic writing prompts is a successful instructional strategy to improve the academic writing in Spanish of college students, mainly during their first semesters. A combined methodology, with pre- and post-tests, was used in this research project conducted from July 2009 to June 2010. The participants were freshmen students of different disciplines of the Human Sciences in a private university in Bogota, Colombia. The aim of this research project was twofold. First, it sought to identify the difficulties students faced in the writing process of academic texts when they are related to real communicative contexts. Second, it involved the design and application of the guided and systematic use of writing prompts for academic writing in a sequence called "The Cognitive Pedagogical Model of Writing for Higher Education". The results show empirical evidence supporting the use of writing prompts designed with specific academic purposes to improve the academic writing level of college students in their first stages of study. However, further research is needed to consolidate the results presented here.

Keywords: communicative competence, blended learning, meaningful contexts, writing prompts, cognitive processes, autonomous learning.

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Resumen

El trabajo presenta datos empíricos que apoyan la hipótesis de que el uso sistemático y guiado de consignas para la escritura académica es una estrategia exitosa para mejorar la escritura en español de los universitarios, especialmente durante sus primeros semestres. En este proyecto de investigación realizado entre julio de 2009 y junio de 2010, se utilizó una metodología combinada que incluía pruebas previas y finales. Los participantes eran estudiantes de primer año de las diferentes disciplinas de las Ciencias Humanas en una universidad privada de Bogotá, Colombia. La investigación tenía un doble objetivo. Primero, buscaba identificar las dificultades de los estudiantes al redactar textos académicos relacionados con contextos comunicativos reales. Segundo, involucraba el diseño y la aplicación del uso sistemático y guiado de consignas para la escritura académica en una secuencia conocida como "Modelo Pedagógico Cognitivo para la Escritura en la Universidad". Los resultados proporcionan evidencia empírica que apoya el uso de consignas diseñadas con fines académicos específicos para mejorar la escritura académica de los universitarios en sus primeros semestres. No obstante, se requiere mayor investigación para consolidar los resultados aquí presentados.

Palabras clave: competencia comunicativa, aprendizaje combinado, contextos significativos, consignas, procesos cognitivos, aprendizaje autónomo.

Introduction

When Colombian students finish their primary and secondary cycles of education, they are expected to be capable of using their writing abilities to perform skillfully when facing academic demands in college. However, on the basis of our experience as writing instructors for first semester students in different undergraduate programs at a university in Bogotá and the results of the Icfes Saber II national test, most college students start their undergraduate programs without having the tools for academic writing and without a wide perspective of the cognitive processes or the syntactical, semantic and pragmatic levels of analysis involved in text-writing processes (texts conceived as communicative products).

Bearing these ideas in mind, we decided to work on the implementation of a research project to improve the level of academic writing though the use of systematic and guided writing prompts. We designed pre-test and post-test phases and a treatment of systematic writing prompts called *The Cognitive Pedagogical Model of Writing for Higher Education* (MPCE, according to its acronym in Spanish) to foster the improvement of argumentative and critical skills. Although we recognize the importance of reading in literacy practices, we were interested in documenting the difficulties freshmen students face with academic argumentative writing, because the mainstream literature has focused mainly on reading and Latin America needs more research on literacy practices at different levels (Seda-Santana, 2000). The pre-test results evidence the difficulties already noticed in our students in class when writing for academic purposes.

The participants involved in this research were freshmen enrolled in four academic writing classes that are part of the core curriculum at a private university in Bogotá, Colombia. The participants were pursuing programs in the Human and Social Sciences, such as Management and Business Administration, Anthropology, Sociology, Philosophy, Liberal Arts, History, Journalism and Economy, where reading and writing play an important role in academic success (Jordan & Plackans, 2003).

Research Background

During the literature review stage of this research process, we found several writing approaches and models in real contexts of communication. The first proposal we considered was by Marjorie Montague (1990), who stated that the development of new technologies allows for the creation of new instructional strategies for an easier teaching technique of writing processes. On the other hand, Anderson (cited by Montague, 1990) proposes the concept of *schemata*, which are different ways to organize texts according to specific communicative needs. In turn, Brown (cited by Montague, 1990) states that writing should also be considered as a complex task which includes different meta-cognition processes; these meta-cognition processes are those according to which the writers reflect on their own thinking schemes and the way they organize information. On the other hand, Sternberg (cited by Montague, 1990) focuses on the study meta-components, which are process in which learning capabilities are analyzed, and evaluation and monitoring processes are implemented.

Another model regarding writing processes is the one proposed by Flower and Hayes (1981), which presents a set of thinking processes the writer develops when writing. To do so, it is necessary to go through one stage before going on to the next one. As part of this proposal, the authors also included aspects such as rhetorical problems, memory recovery, and the stages of planning, translation and revision. These are the stages the writer is supposed to cover in order to write a text.

On the other hand, Lu and Suen (1995) suggested the existence of more suitable cognitive approaches for solving specific problems. According to these approaches, students establish relationships among the cognitive styles, the contents, and the evaluation processes based on criteria. Another reflection on cognitive processes regarding writing processes is the one proposed by Cobb and Bowers (1999). According to these authors, cognitive perception is closely related to conceptual processes and operations regarding sensor-motor activity. In this sense, situated learning represents a learning strategy that makes knowledge generation easier, based on interactive systems the individuals are related to. These cognitive processes include a set of analysis units that have to be related to certain previously stated purposes.

Regarding instructional strategies, Shih (cited by Cobb & Bowers, 1999) proposed that it is necessary to implement a set of four instructional strategies to make writing processes easier in academic contexts. The first strategy is the creation of modules according to themes. The second is the creation of writing courses based on contents. The third procedure is the creation of English language courses as tools to make reading processes and information searches easier for students. The last strategy conceived by the authors is individualized tutoring sessions for students to solve writing problems and to improve writing processes.

Mosenthal (1983) introduced the Pyramidal Model of Contexts for Written Competence in the classroom. According to this model, there are four contexts to be considered in writing processes: the first is the writer's context. The second is the material contexts, which means the topic or the situation encouraging text writing. The third one is the tasks context, which is related to the criteria for writing texts in accordance with certain particular formats. The last context is the situation organizer, which focuses on the potential reader of the text.

Berthold, Nuckeles & Renkl (2007) carried out a research aimed at measuring the effectiveness of instructional tutoring offered by some professors to students (in their first year) enrolled in an undergraduate psychology program. The researchers offered different types of tutoring: cognitive processes tutoring; tutoring about meta-cognitive processes; tutoring combining the processes previously considered; and another kind of tutoring which did not include any consideration regarding learning strategies. Findings of this group of researchers suggest that tutoring helps students to improve their academic performance.

In a similar study, Berthold, Nuckeles & Renkl (2003) analyzed whether there is a relationship between learning protocols writing and the use of learning strategies. These researchers found out that when students receive training on the use of learning protocols and strategies, they can improve their comprehension levels of different contents analyzed in college.

Bereiter & Sacardamalia (1987) suggested that writing is a mechanism for problem solving which involves a dialectic movement between content and rhetorical space. According to these authors, writers can take advantage of this dialectic movement to transform their knowledge about any particular topic.

Regarding writing, Bangert-Drowns, et al. (2004) states that writing is important for educational processes if there is an awareness of the fact that these processes are the basis for meta-cognitive and self-regulated learning processes carried out in formal education. Shraw (1998) proposed three strategies (planning, self-control of comprehension and evaluation) for helping students acquire the capability to assess the efficiency of learning processes and products.

Breetvelt, van den Bergh & Rijlaarsdam (1994) focused their research on the relationships between the cognitive activities developed in the different stages of writing processes and the quality of writing products. The authors came to the conclusion that some stages (like organization and planning) are more useful in the first phases of the writing process, whereas some other activities (such as establishment of writing goals and evaluation) are more useful when writing products are already finished. In a research process similar to this one, Kellogg (1987) sought to establish whether the quality of a text depends on the draft prepared at the composition stage. This research also found that more skillful writers prepare more precise drafts (in terms of ideas and sentences), so their texts are clearer.

In Latin America, particularly in Colombia, research studies show the challenges freshmen students face when they start their undergraduate programs, the lack of resources to overcome their writing and reading weaknesses, and the change of literacy culture from high school to college (Uribe-Álvarez & Camargo-Martínez, 2011). In this study, we focused particularly on academic writing processes in the first stages of college education. We aim to assess the level of academic writing when students start their higher education cycle and to test the implementation of guided and systematic use writing prompts in a sequence called "Cognitive Pedagogical Model of Writing for Higher Education".

Theoretical Framework

This section presents the theoretical background that has guided the model proposed. The first concept to be considered is that of *Competence* proposed by N. Chomsky (1965). According to this concept, native speakers of a language can produce an unlimited number of sentences due to their knowledge of grammar structures. This native speaker's capability or competence is conceived as an abstract capability, which cannot be evidenced. Besides, this capability should be distinguished from *Performance*, which is a concrete and evident linguistic behavior.

In the 1970s, Hymes (1971) proposed the *communicative competence* concept as a set of capabilities and knowledge empowering the speakers of a specific linguistic community to understand one another. This competence starts to be evident almost from the beginning of speakers' lives; its complexity level will increase as the communicative needs (related to different communicative contexts) speakers have to meet make them learn new abilities. According to this, the same characteristics are evident in written communicative competence. This means that college students already have a certain level of this competence, but they have to face more complex communicative contexts and needs as they enter the university level. Therefore, college students need to develop some other capabilities and knowledge to face this new academic context.

Martínez (2004) points out that learning is a process based on the human ability to make schemes and to incorporate them into the cognitive macro-structure. These more simple schemes get intertwined and become more complex every time due to the need of adaptation to new problems to be solved. Regarding the written communicative competence, students have a certain writing level when they enroll in undergraduate programs. As they reach higher levels in their educative program, reasoning and abstraction levels get more and more complex. Hence, college students should adapt to these new problems and the increasing complexity of their reasoning structures.

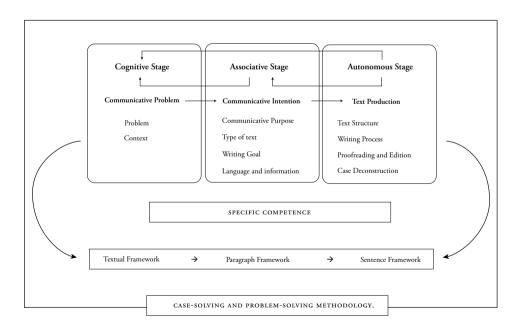
When students develop the capability to solve new problems in a specific domain, they become expert apprentices, and are no longer novice apprentices (Pozo, 1996). In this sense, college students are supposed to start gradually developing higher complexity levels and developing abilities similar to those of an expert apprentice. Communicative problem-solving prompts locate writing in a particular context with specific communicative objectives that resemble authentic characteristics of writing production. Academic writing prompts at the college level help to increase the conceptual planning and the quality of compositions when they generate the ability to solve communicative problems that involve writing as a form of communication or response.

This concept of expert apprentice is closely related to the concept of autonomous students, understood as students who are capable of reasoning on their own learning process, which includes the critical thinking procedure of reasoning and different points of view (Kamil, 2003). Regarding written communicative competence, autonomous students have appropriate writing habits for producing suitable texts for different communicative contexts. Furthermore, autonomous student have appropriate criteria for evaluating their own texts. Since these *autonomy* characteristics (which we intend to provide our students with) can be internalized in different contexts (not only the classroom context), we decided to use the methodological approach provided by Blended Learning. This approach is thought to be any possible combination (from a wide range) of learning means designed to solve specific problems (Brenan, 2004). In this study, we designed a systematic and guided use of writing prompts with different levels of complexity according to the writing objectives. We defended the hypothesis that the systematic use of academic writing prompts implemented in the sequence called "Cognitive Pedagogical Model of Writing for Higher Education" helps college students to improve their academic writing levels as well as their autonomy in the writing process.

Description of the MCPE

The strategies we designed for improving the development of written communicative competence are based on the implementation of systemic and guided writing prompts in a sequence called "Cognitive Pedagogical Model of Writing for Higher Education" (MCPE from now on). This model is conceived as a structure to help students and professors reflect on cognitive, communicative and pedagogical processes related to writing, as well as make decisions regarding writing. The objectives we established for this model were: first, to propose a tool for collecting evidence of cognitive and communicative processes involved in writing; second, to provide students with certain strategies to face text-writing processes more easily, through reflection on certain stages or phases proposed in MCPE; third, to help students learn a set of criteria for assessing and evaluating their own texts, and thus increase their autonomy level regarding their own learning process in academic contexts; and, finally, to encourage students to reflect on the relationship between communicative problems and communicative purposes, the kind of reader the text is addressed to, and the writing goals. In this sense, we expected students to learn how to use a set of pragmatic criteria for writing in different communicative contexts, particularly in academic contexts.

The MCPE includes the following stages and frameworks:



Graph 1. Cognitive Pedagogical Model of Writing for Higher Education.

The MCPE starts with the objectives of the writing activity, followed by the description of the specific competence the student will develop through it and the writing prompt or case. We present here a brief description of each component:

Objectives

The writing learning goals are set forth in this section. These goals guide students' performance regarding the writing task and set the expectations for the activity.

Description of the Specific Competence

This refers to the specific competence to be developed through the writing task. In this part it is important to establish the competence complexity level to be reached.

Case (writing prompt)

A real communicative context is presented in this section. Based on this real communicative context, students are supposed to plan and write their texts. We have included this section in the model considering that the specific written communicative competence can be measured more appropriately when related to a communicative context students are supposed to face in their daily lives, within and outside academic contexts. Each case proposes a communicative problem the student has to solve through writing a text. Besides, every case states a communicative role for the student according to which the proposed problem is supposed to be solved.

When students have read the case or writing prompt, they are encouraged to follow three stages to write the required text. These three stages are adapted from Anderson's stages of qualitative development of basic abilities: cognitive, associative, and autonomous (1995). These stages will clarify student's communicative purposes and guide them in making decisions regarding writing strategies.

First Cognitive Stage: Cognitive Stage

In this section, students should answer a set of questions designed to establish clear information needed for solving the case previously formulated. Those questions are focused on:

Problem

In this section students identify the particular characteristics of the context and circumstances under which they are required to write a text. The identification of the communicative problem that triggers the construction of a written text may serve as an outcome to make decisions about the writing strategies to be used.

Communicative Context

The questions regarding communicative context are thought to help students elicit useful information related to the elements of the communicative act. Particular time, space and socio-cultural features may play an important role in determining the type of text and language to be used, among others.

Participants

Questions regarding participants help students establish who is involved in the communicative event the text written on. Besides, this section helps students consider who the reader of the text will be, as well as reader's characteristics.

Second Stage of Analysis: Associative Stage

On the basis of the answers given by students in the previous section, this analysis stage points to a decision-making process regarding the planning of the text to be written. In this phase, the student should relate the communicative problem, the communicative context, participants, planning stage, and the written text (the final communicative product). This stage involves certain questions related to these elements:

Communicative Purpose

These questions help students state explicitly the communicative objective(s) to be reached through the text; in this case, the text represents a solution to the problem stated in the case formulation and has a specific intention.

Type of Text

Students should establish what kind of text is the most suitable for the communicative purpose previously stated. In this model, we have considered the typology proposed by E. Werlich (cited by Simón, 2002), which includes four basic types of texts: narrative, descriptive, expository, and argumentative.

Writing Goal(s)

This section helps students consider what the most suitable format for the text is. Some text formats considered by students are letters, essays, reviews, etc.

Specific Details regarding Language

These questions are proposed to help students make decisions about the most suitable types of words and varieties of language (standard variety, specific terminology, etc.) for the communicative context previously considered (Meta-cognition).

Specific Details regarding Information

This section encourages students to assess and evaluate the quality of sources and information. The main criterion in this section is students' capability to select the most appropriate sources considering the aspects previously stated (considering information regarding communicative context, communicative purpose, and characteristics of the reader of the text), as well as verifiability, reliability and trustworthiness.

Text Structure

This section asks students to establish a structure or a diagram to organize the text before writing it. As the writing process is not rigid, students can make decisions during the stages and make changes when necessary.

Development

In this phase, students work specifically on the writing process and the revision and editing stages (considering textual, paragraph, and sentence frameworks of production).

Third Stage of Analysis: Autonomous Stage

This phase has been divided into two evaluation and assessment processes carried out by the students in order to ensure the text's pertinence and quality.

Case Deconstruction

In this process, students establish whether (once the text has been written, revised and edited) the resulting text appropriately solves the problem stated in the case. Here, students are able to create a rationale for their choices and for the assessment of other texts through a process of deconstruction.

Argumentation process related to the solved case

In this stage, students show their arguments supporting all the decisions made about the written text.

Our hypothesis is that this model is the foundation for the development of increasing autonomy and expertise in academic writing for college students, when used in a systematic sequence and not as a sporadic exercise. To test this idea, we implemented a treatment with pre and post-test phases. The methodology is described in the following section.

Methodology

We used a mixed methods design, with an intervention of the sequence for one semester with each group during two academic semesters (March to June, 2009 and June to December, 2009). Approximately 150 students participated in this study, divided into 6 groups of 25 students (3 groups from one semester and the other 3 from the following semester). The classes were taught in two-hour sessions twice a week; this means each group had four hours of workshop during 16 weeks, and an amount of hours of independent study. We implemented the strategy in three learning contexts for each group: workshop classroom, virtual class, and tutoring sessions. For each learning context involved in this research, a set of suitable model implementation strategies was developed. For example, in the workshop-class context, some exercises were solved with the students in order to model how to solve certain difficulties regarding writing, as well as to answer the questions that arose when students took the tests. For each test (pre- and post- treatment), students were required to write a text on the basis of an academic prompt that proposed a problem-solving case. As a writing guide, students were asked to answer the questions proposed for the cognitive, associative, and autonomous stages.

The final text produced for each test was assessed and evaluated according to content and form criteria, which included textual, sentence, and paragraph levels (Chart I). The assessment and evaluation form used to evaluate each test includes a set of descriptors of the competence development, according to the criteria considered for evaluating and assessing the writing process and planning, as well as the final texts produced by students. The evaluation is measured according to a qualitative and quantitative range from I to 5 (Chart 2).

Evaluation and Assessment Criteria				
Content				
Cognitive stage	Identification of communicative context.Identification of participants and their most relevant characteristics.Identification of communicative purpose.			
Associative stage	 Determination of the type of text Determination of the product of writing Language adjustment Adjustment to the academic context (in case of need): reference to sources, disciplines, conceptual frameworks, etc. Content structure 			
Autonomous stage	Capability of reconstruction and explanation.Capability of argumentation.			
Form				
Textual framework	Parts of the textTitleStyleFormat			
Paragraph framework	ConnectorsCompositionTheme order			
Sentence framework	 Punctuation Grammar Spelling Semantic aspects 			

Chart 1. Evaluation and Assessment Criteria

Chart 2. Assessment and Evaluation Form

PEDAGOGY OF WRITING

ASSESSMENT AND EVALUATION FORM

COMPETENCE: Capability for writing an argumentative text that is adapted to the production context and that follows the minimum requirements or argumentative structure and academic writing.

Evaluation: 5. Expert performance 4. Good Performance 3. Fair performance 2. Novice Performance 1. No performance at all

CONTENT							
STAGES	ELEMENTS	DESCRIPTORS	5	4	3	2	I
COGNITIVE	Problem	Student identifies clearly the problem stated in					
		the case.					
	Context	Student identifies the characteristics of the					
countrie		context in which the problem is set.					
	Participants	Student establishes particular characteristics of					
		the intended reader.					
	Communicative	Student identifies the text goal and it is					
	Intention	coherent with the problem.					
ASSOCIATIVE	Type of Text	Student recognizes the type of text suitable to					
		the communicative intention.					
	Writing Goal	Student chooses the suitable format in order to					
		achieve the goal and fit with the context.					
	Language	Student identifies aspects related to suitable					
		language according to the context.					
	Information	Student understands and uses properly					
		information, concepts and references.					
	A	Student is able to support the decisions taken					
AUTONO-	Argumentation	during the process.					
MOUS	Structure	Student plans and structures the text properly.					
FORM							
FRAMEWORK	ELEMENTS	DESCRIPTORS	5	4	3	2	I
TEXTUAL FRAMEWORK	Tout nanta	Student structures the text in such a way that					
	Text parts	it is easy to identify its parts.					
	Title	Student proposes a suitable title.					
	Style	Student cares about style and composition					\square
		techniques.					
	Presentation	Student follows instructions about the					
	Form	presentation format.					

PARAGRAGH FRAMEWORK	Connectors	Student uses connectors coherently.			
	Composition	Student writes well-formed and cohesive sentences.			
	Thematic Order	Student follows a coherent thematic order.			
SENTENCE FRAMEWORK	Punctuation	Student uses punctuation properly.			
	Grammar	Student follows the rules of grammar.			
	Orthography	Student uses the rules of orthography properly.			
	Semantics	Student shows a proper use of word meaning and word suitability.			
OBSERVATIONS:					

The assessment and evaluation form includes the criteria established according to the MCPE and a set of competence descriptors to measure students' written communicative competence. This set of 21 descriptors included in the model turned out to be a useful strategy to make students aware of the cognitive, communicative, argumentative and pragmatic complexity involved in writing processes. Pre-tests were administered at the beginning of the semester and post-tests at the end of each semester. The treatment included the guided and systematic use of writing prompts according to the sequence proposed in the MCPE throughout one academic semester.

The treatment was implemented in the three learning contexts (Blended Learning): as class practice and modeling in the workshop-class; as additional practice and individual exercise in the virtual classroom (Moodle); and to improve individual weaknesses through individualized tutoring in the Writing Laboratory. On the one hand, the virtual classroom works as a complementary and autonomous learning space. On the other, the Writing Laboratory was an academic environment proposed for students to work on their specific difficulties regarding writing with the help of a tutor-professor. These difficulties were solved through the design of an action plan. Furthermore, the action plan proposal also helped students internalize the suitable criteria for evaluating and assessing their own written production.

Pre and Post-Treatment Tests

In this section, we present a sample of the pre-treatment test, based on the MCPE, implemented with students involved in this research process (Chart 3).

Chart 3. Pre-Treatment Test

STUDENTS NAME:					
BUBJECT-MATTER: DATE:					
овјестиче: Establish a diagnosis of the level of students' written competence for establishing individual and group work goals for this semester.					
COMPETENCE(S): Ability to write an argumentative text, which is adapted to the production context and that follows the minimum requirements or argumentative structure and academic writing.					
Read the following case. Then, go through all the analysis phases and write a text that follows the requirements for the case to be solved.					
CASE: Mobility is a central issue for Bogotá government authorities. Therefore, the current city government has proposed a project for building an integrated transportation system which will be part of the metro system. However, there is a deep debate regarding this issue since many citizens have positions for and against the construction of the metro system. The following are the most important aspects to consider when deciding whether building the metro system in Bogotá is feasible or not: financing, other countries' experience when building metro systems, technical and urban development analysis, and cost-benefit factor, among other aspects. You, as a civil society representative, will send a document in which you present and support the most convenient option for the citizens of Bogotá regarding this important topic. This text will be sent to the government institution in charge of the decision-making process for the construction of the metro.					
CASE-BASED REASONING: FIRST STAGE OF ANALYSIS (Cognitive Stage):					
PROBLEM: What is the communicative problem presented in the stated case?					
COMMUNICATIVE CONTEXT: What is the communicative context in which the problem has arisen?					
PARTICIPANTS: Who participates in this communicative event? Who is the reader of this text?					
COMUNICATIVE PURPOSE: What is the communicative purpose in order to solve the stated problem?					
second stage of analysis (Associative Stage):					
TYPE OF TEXT: What kind of text are	e you about to write?				
WRITING GOAL (PRODUCT): What text are you going to write? What format are you going to use for your text (letter, essay, review, report, act, article, etc.)?					

SPECIFIC DETAILS REGARDING LANGUAGE: What special language requirements regarding context should be taken into account for your text?

SPECIFIC DETAILS REGARDING INFORMATION: In case this text is written for an academic context, what special requirements must be followed reagrding sources, formats and information search?

STRUCTURE: What kind of diagram would be useful for proposing the text content structure? Propose that diagram.

DEVELOPMENT: Write a first version of your text. Then, go through the proofreading and editing process. Finally hand in the final version of the text.

The results of the pre-treatment test were presented to each student with observations on their performance in order to establish specific learning goals and foci of the treatment. At the end of each semester, a Post-Treatment Test (proposing a different case but including similar structure and complexity level) was also implemented. Results of both tests were presented to the participants including the evaluation and assessment matrix of evaluation with observations. Beyond the quantitative grade, we focused on the qualitative particularities of each student and the most salient group needs.

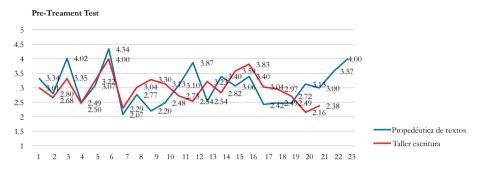
We believe it is important for students to know these evaluation and assessment criteria since students could use them on their own to evaluate their texts, thus becoming the first evaluators of the text they write. In this way, we could encourage students to reach higher autonomy levels in their writing processes. Besides, we also believe it is important for students to be aware of the fact that these criteria can be used to evaluate and assess any kind of texts, so they could be considered as assessment tools. To guarantee reliability, these evaluations were previously tested in a pilot project with a similar number of students. However, this study did not have a control group to verify other influential variables. Therefore, we recognize that further studies are necessary in order to improve the methodology.

Results

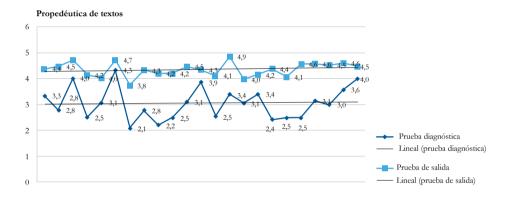
This section shows the general results of the pre and post- tests implementation of two groups of students during the same semester; however, as the results were consistent across groups, these results show the tendency presented by the other four groups included in this study. Graph 2 shows the general performance level of 44 students (21 in one class called "Taller de escritura" and 23 in another class called "Propedéutica de textos", who took the pre and post-treatment tests in the second semester of the study). In the graph, the numbers in horizontal axis represent each student who presented the test, distributed randomly; and the vertical axis shows the level of general performance in the test on a scale from 1 to 5, computing the 21 descriptors presented above in the assessment and evaluation form. The color red represents one group and the blue, the other group. As can be observed, most of the students started the course with a very low academic writing level. The general level of writing performance of each group was between 2.9 and 3.05 on the vertical scale. We also noticed the differences in performance among students; while few students were over 4.0, we had five students under 2.5. With these students we intensified the use of the Writing Lab, in order to help them with their individual difficulties.

At the end of each academic period, the academic writing level improved considerably in certain cases, particularly when students attended the Writing Laboratory. The general level of each group also increased to 4.5 on the assessment scale. Graph 3 and Graph 4 show the comparison between the pre-treatment test and the post-treatment test for each group. Each number on the horizontal axis represents the same student's performance in both tests; for the first group, the dark blue series represents the pre-treatment test general results, while the light blue series represents the post-treatment test general results (Graph 3); for the second group, the dark red series represents the post-treatment test general results (Graph 4). The two graphs also show that the students who showed less comparative improvement were the ones who had the highest writing level at the beginning of the course. In contrast, the students who advanced the most. However, all the students in this study improved their academic writing level.

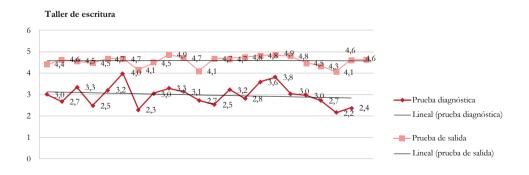
Additional graphs were made for each descriptor and comparison between critical descriptors; we also considered variables such as frequency of attendance to the Writing Laboratory and the virtual classroom. Due to space constraints, we only present here the general results of two groups. However, it is important to note that both groups had a low academic writing performance at the beginning and a substantial improvement throughout the semester.



Graph 2. Pre-Treatment Test Results



Graph 3. Comparative Pre and Post-Treatment Test Results for Group One



Graph 4. Comparative Pre and Post-Treatment Test Results for Group Two

Conclusions

According to the data analysis and results, these are some of the conclusions of this particular study:

(a) When students enrolled in undergraduate programs in the Human and Social Sciences, the majority did not show an academic writing level which could help them reach an optimum academic performance in the first semesters of the program. For example, in the first group (See Graph 3), only 17.03% scored around 4.0, while 43.50% scored under 3.0 in the pre-treatment test. This low writing level may influence students' performance in subject-matters where academic writing is a fundamental skill for academic achievement.

(b) Students in first semester, at least in the context studied, are very diverse in terms of the academic writing level they have at the beginning of their undergraduate program. For example, in Group 2 (See Graph 4), student number 20 scored 2.2 on the academic writing scale, while student number 6 scored 4.0 in the pre-treatment test. This fact influenced the instructional decisions in the classroom, as the needs varied considerably. Even among students who have a similar general level, the specific kind of skills they need to strengthen may vary significantly. This means that it is necessary to design an action plan for making students with lower competence levels reach a suitable level of this competence, so they can reach the average level in a group or the competence level expected for a specific course.

(c) The implementation of the systematic and guided use of writing prompts in which the student faces different context-based communicative problems has a positive impact on freshmen's academic writing level. The post-treatment test results show a consistent improvement in all the students who participated in the project. One way to improve the students' level of written communicative competence in college is the awareness regarding communicative needs, communicative context, the reader, and the communicative problems related to the text to be produced by the student. However, other studies are necessary to confirm these results as we did not have control groups and we did not measure other variables like motivation and socio-cultural background.

(d) The results of a significant number of tests showed deep inconsistencies among the answers given by students to the questions asked in the cognitive and associative stages of analysis and the final written text they produced. Our hypothesis is that these inconsistencies could be related to a lack of connection between theory and practice. For example, a student might have some theoretical background regarding different types of texts, although he would have serious difficulties establishing the type of text that suits better a communicative intention or how to produce effective context-based texts. However, further studies are needed to confirm these relations.

(f) Tutoring and assisted virtual practice had a positive impact on students with lower levels of written communicative competence who need higher improvement in a determined period of time. For example, students number 9, 17 and 18 in group 1 (See Graph 3), who used these strategies, showed a comparatively higher improvement as they increased their academic writing level by almost two points in one semester. These strategies could be particularly useful for courses with large groups of students, in which it is difficult for the instructor to have a direct and close relationship with every single student.

Finally, writing (and reading) is a complex task that involves cognitive, communicative and linguistic features and skills. Furthermore, writing is a lifelong process which requires a high autonomy level on the part of the student. For these reasons, it is important to design instructional strategies that help students become meta-cognitive of this complexity and internalize criteria to become skilful and expert writers according to communicative expectations in academic contexts.

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