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DESCRIBE WRITING AS A SUPPORT ELEMENT IN THE WRITING OF ACADEMIC TEXTS AND SCIENTIFIC ARTICLES

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Abstract: The competence to write technical, academic and/or scientific texts must be more than a generic competence, given that higher education is the last formal stage of professional development. To achieve the writing skill that facilitates writing reports on academic activities, such as the final project of a summer of scientific research, writing the technical report of the professional residency or carrying out the methodological writing of a thesis, it is necessary to implement transversal training actions. throughout the entire curriculum. This implies that training actions must be planned in various subjects throughout the entire training process. It is not enough to teach the student in a single subject how to write, for example, the theoretical framework, methodology, analysis of results, conclusions and recommendations. After receiving these teachings, the student must practice and practice, which implies that several teachers in different subjects must promote this skill. In this document, we present a proposal for methodology and content that supports the training actions necessary to develop writing competence. This proposal is based mainly on Cassany's (2012) position, which emphasizes the importance of learning to write, reading as a writer, understanding and using the characteristics of written language, and becoming aware of the cognitive processes involved in the composition of the text. This document presents a proposal for methodology and content to support training actions that lead to the achievement of the competence of writing with clarity and precision.

Keywords: Written Code, written composition, adequacy, cohesion, coherence.

INTRODUCTION

Teaching how to write clearly and precisely must have much more importance than just declaring this "soft" skill as mandatory on the resume. In higher education, it is essential to plan this instruction as a transversal training process, with the aim of achieving this skill, since it constitutes the final stage of students' professional development. Graduates require this capacity because their professional practice requires them to prepare technical reports. The same thing happens if the graduate continues his professional training in postgraduate studies, because then he will have to write research projects.

However, to develop this skill it is not enough for a specific subject to teach how to write a document, using the characteristics of the written code, such as adequacy, logical cohesion, structural coherence of content, as well as grammatical correctness. It is required that these transversal training actions be repeated in other subjects, so that students have the opportunity to practice and develop the skill gradually, in various contexts and academic disciplines, with the advice and supervision of their teachers.

It is in this context that this work is developed, with the purpose of presenting a methodological and content guide to support training actions aimed at the development of writing competence in higher education. The writing of the theoretical framework topic and the justification in the final professional residency report is used as an example, which is a requirement that students enrolled in the Tecnológico Nacional de México (TecNM) must meet to graduate. To do this, the content and form structure of a research protocol is taken as a reference.

The proposal for transversal training to acquire the written code is based on various ideas of Cassany (1989), a reference writer on the topic of the cognitive processes involved

in writing. This author maintains that it is more effective to learn to write by reading as a writer than by only taking grammar courses. This does not mean that you avoid knowing the syntactic structure of Spanish and the way in which grammatical elements are used to correctly write a sentence. You learn more if you understand and apply the characteristics of written language, and to this is added the attitude of becoming aware of the advantages of knowing how the cognitive processes involved in the composition of the text operate. The development of this work considers the effects of the idea that a non-affiliated professional is incapable of arguing with clarity and precision when writing written documents.

The proposal of transversal training actions to develop in students the ability to write various academic texts in a coherent, clear and precise manner, is based first on presenting the ideas on which Cassany bases how the path can be taken to acquire the written code and so use it in the composition of a text. In the textbook "Describing writing", (Cassany, 1989) addresses the idea that the act of writing is a cognitive process that maintains a double perspective, the social and the cultural, since good writers must master clarity and the precision to socialize a topic effectively. Additionally, text composition requires a clear understanding of the purpose, audience, and context in which the writing occurs. Only this way can the written text promote cultural development. Cassany argues how social and cultural context influence writing and how technology can help the way we write.

The second part of this transversal training action consists of developing the strategy to involve students in two workshops on knowledge and practice of written composition. One consists of "*reading like a writer*" and the other in the knowledge of basic grammar to write scientific academic texts, with adequacy, cohesion, coherence and grammatical correctness. The workshop describes the route to writing a research and professional residency protocol, as well as how to write the final report. As a third element of the transversal training action, the second workshop explores the correct application of some grammatical elements in the writing of a theoretical framework and justification, structural elements of a research protocol.

The main texts used in training actions to write academic texts and scientific articles are the books by Daniel Cassany, "Describing writing" (1989) and "The kitchen of writing" (1993). The grammar manuals of the Royal Spanish Academy are used, the Basic Grammar books by María Moliner (2013) and "How to Write", by Teresa Serafini (1994). These texts are the basis for the reference guides and support for the exercises in the training workshops for effective writing. Some of the grammatical elements considered in this document.

- **Morphology.** Addresses the structure and formation of words, including grammatical categories (nouns, adjectives, verbs), among others. Besides, pronouns, adverbs, prepositions, articles and determiners.

- **Syntax:** It deals with the study of the structure and order of words in a sentence, as well as the grammatical and syntactic relationships between the different ideas in a sentence.

- **Sentence:** It deals with the analysis of the different structures of sentences, including the classification into affirmative, negative, interrogative, subordinate clauses, etc., and the study of verbal complements.

- **Agreement:** It is used to study the agreement between the different elements of the sentence, such as gender and number between the noun and the

adjective, the subject and the verb, among others.

- **Verb tenses:** Allows the study of different verbal tenses and modes, as well as their use and conjugation.

All these grammatical elements are useful to develop the research protocol that is included in the Research Workshop subjects, knowledge necessary to prepare the final professional residency report in the courses taken at TecNM. This proposal for transversal training action is also useful for postgraduate studies.

DEVELOPMENT

Cassany (1989) begins the presentation of his book "Describing writing" by explaining the function that thought and language develop when writing a text. The yellow section of Figure 1 allows us to visualize some of the linguistic and psycholinguistic elements that influence the art of text composition. It bases the way in which Linguistics and Psycholinguistics configure the grammatical structure of the language to enable writing skills. From the point of view of cognitive psychology, the thought-language duality is exercised as the process to communicate verbally or in writing.

Cassany interprets Noam Chomsky, creator of generative grammar, by pointing out that there is a grammatical language that is natural, which allows us to learn to speak and write without studying grammatical syntax or the semantics of meaning. Chomsky, (1979) states that any individual who can speak is capable of communicating in his or her natural language and understanding the message that ideas or processes communicate to him or her in the same language. This means that thought organizes the ideas that we have in memory about a subject and from this it configures the structure of the composition of the text. In this sense, language serves as a tool to capture communication situations in a written text, according to what is meant and how the message has been planned to be communicated.

The green part of Figure 1 outlines the way in which the author classifies different types of writers, whose deficiencies and abilities determine whether or not they master the written code. Cassany cites Flower and Hayes, who have discovered important differences in the communication situation between competent and poor writers. Good writers are aware of the use and planning of the rhetorical function, which not only communicates, but also persuades and delights. On the other hand, bad writers do not correctly define the communicative situation and do not know how to plan, write or examine the composition of a text. The figure also shows the importance of having or not mastering the written code in this classification.

The third part, blue in Figure 1, summarizes the way in which the author emphasizes that speaking is not the same as writing. He is emphatic in pointing out that it is very inefficient to take Grammar courses, due to the considerable time consumed in the effort to acquire written code. Cassany (1989) clearly explains that to learn to write, *you have to learn to read and read a lot*, because this strengthens what is stored in long-term memory about a particular topic. However, he maintains that it is very important to know the properties of written composition.

Furthermore, in his text the author refers to the contributions derived from Krashen's research to describe competence in written code. When examining the ideas of this author, Cassany expressly defines that competence over the written code is the set of knowledge of Grammar and language that writers have in memory. Regarding acting, he points out that it is the process of structuring the composition of the text and defines it as
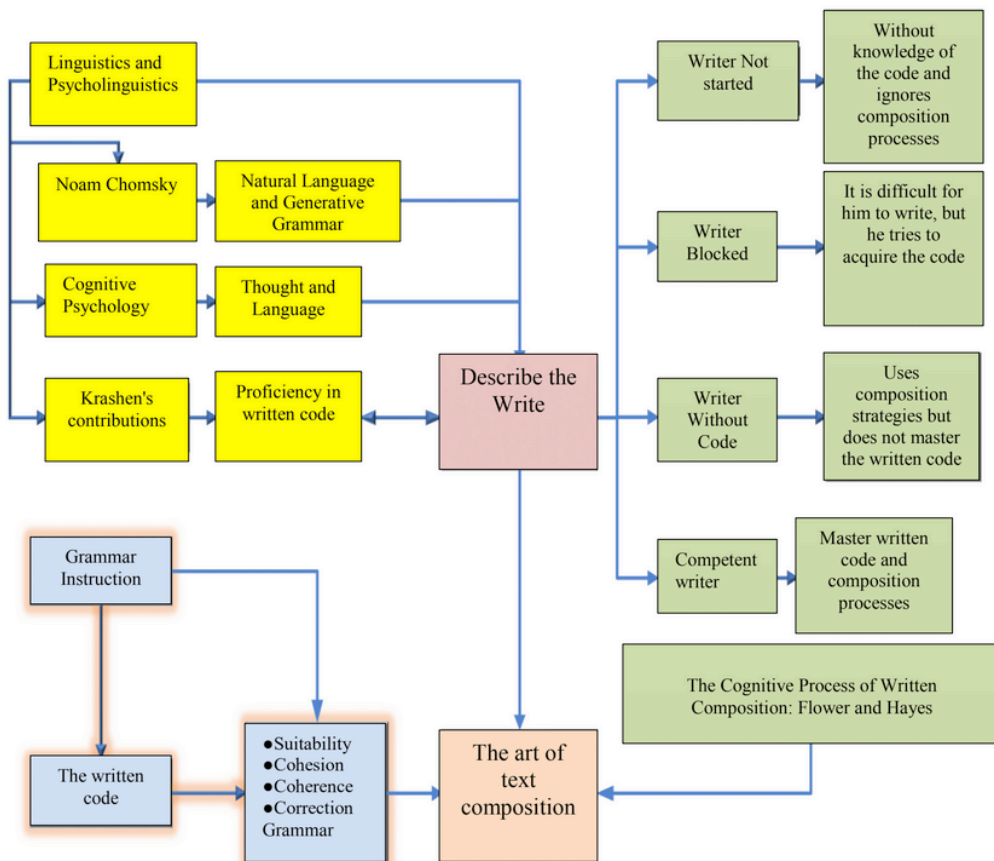
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Figure 1. Key elements that participate in the composition of a text. Own elaboration of the book "Describing writing".

the set of communicative strategies that are used by authors to produce a piece of writing. He quotes Krashen on several occasions to say that for this author, there are differences between *knowing and knowing how to do*: Competence is *knowledge* and performance is *knowing how to do*.

THOUGHT AND LANGUAGE, COGNITIVE PSYCHOLOGY AND PSYCHOLINGUISTICS

Before presenting the methodological and content proposal for the transversal training process to promote the development of writing competence, it is necessary to reflect on the relationship between thinking and language. Although when discussing the relationship between thought and language Cassany does not refer to (Vygotsky, 2012) or, who analyze

the meaning of what is communicated and value the relationship and importance that these two cognitive processes have in the ability to write.

In this context, it is important to note that the two cognitive psychologists agree that language is a superior tool of cognitive processes that helps generate thoughts and, through them, establish social interaction, as a basis for active learning and experiential. This social interaction is the process of communication, oral or written. On the other hand, just as reading promotes learning, writing is not only a communicative act, but also an act of learning. This is why Cassany addresses in detail the way in which natural language allows learning to communicate through the competence of knowing how to write.

Daniel Cassany relies on Chomsky to point out that natural language is a complex and flexible system that develops through practice and reflection on that experience. That is, the learning of Grammar can be acquired implicitly (not to say unconsciously), through continuous exposure to language, speaking and reading. It argues that writing competence develops naturally through practice and exposure to different types of texts and communicative situations. From this, he affirms that one learns to write better by reading (*reading as a writer*) than by studying Grammar. Regarding the importance of language, the author develops the idea that it is a tool for the representation and organization of thought. This follows from the interpretation of cognitive psychology. This maintains that language and thought develop interdependently, and that language learning influences cognitive development and vice versa.

In the same sense, it analyzes the relationship between linguistics and psycholinguistics. First it defines these disciplines and then establishes the relationship between them and analyzes the role they have in the study of language in general, and in particular in the construction of written composition. It states that linguistics is the scientific discipline that studies language, both in its structure and its function. Linguistics is interested in the analysis of natural languages and deals with aspects such as Grammar (in its syntactic structure), Semantics (in relation to meaning), Phonetics (speech sounds) and Pragmatics. This discipline characterizes meaning according to the context and its effects on behavior (Serafini, 1994). Regarding Psycholinguistics, Cassany describes it as a discipline that integrates aspects of Linguistics and Psychology. It deals with the study of the way in which language is acquired, processed and used to reflect on the communication of thoughts and their effects, both intrapersonally and interpersonally.

COMPETENCE IN WRITTEN CODE AND TYPOLOGY OF WRITERS

Let's now discuss the question: what is written code? According to Daniel Cassany, the written code refers to the set of rules and conventions that are used to *encode information in the form of written text*, including aspects of grammar, spelling and punctuation. Written code is essential for written communication, as it allows ideas to be transmitted effectively and preserved over time. This general idea is represented in Figure 2, which shows the characteristics that good writing must have. They are the following:
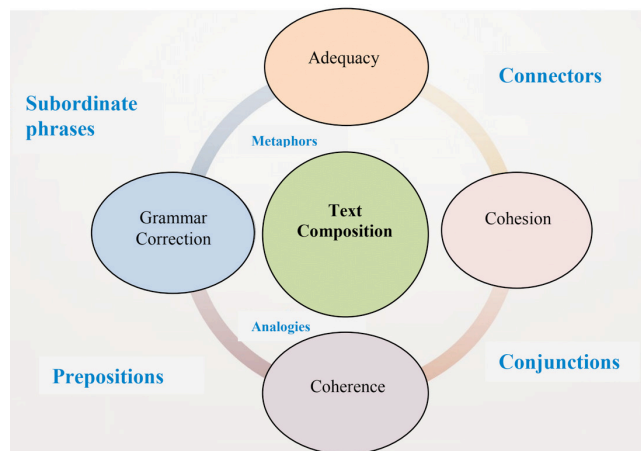

Figure 2. Main elements of the composition of a text

1. *Adequacy:* refers to the ability to adapt the text to its communicative context. That is, the text must be appropriate for the audience to which it is directed. According to Cassany (1993), the purpose sought to be achieved and the textual genre used (scientific, literary, descriptive, among others) depends on those who participate in an audience where the communication takes place. For example, if you are writing an academic text for the general public or

a research or scientific dissemination article, it is important to use simple and accessible language for understanding, but technically correct, with clarity and conciseness.

2. *Cohesion:* bases the text's ability to maintain cohesion between the ideas that compose it. This is achieved through the appropriate use of elements that link the different parts of the text. This applies to main and subordinate ideas, using conjunctions, pronouns and connectors, among other grammatical resources. For example, the use of connectors such as "*therefore*" or "*consequently*" can help different ideas in a text be more related to each other. This is essential to write a good theoretical framework, the justification and its function to address a problem.

3. *Coherence:* refers to the text's ability to be logical and coherent throughout the structure and content of a text. To verify this coherence, a tool called a "congruence table" is useful, a written summary of the project that shows the overall logical relationship of the research questions, objectives, justification, hypothesis and its variables, as well as the methodology and the results to be achieved. The congruence table is a tool that allows us to visualize the connections between the elements of a research protocol.

4. *Grammatical correctness:* refers to the ability of the text to be free of grammatical and spelling errors. A well-written text must be written in proper grammar and free of spelling errors to be considered correct and readable. For example, the correct use of accents, commas, various punctuation marks and capital letters is essential for the grammatical correctness of a text. Grammar specialists and writing manuals include them in punctuation and spelling.

It is important to note that these four features are elements of written code and are interconnected. In summary they can be listed as follows:

1. **Grammar:** The rules and conventions used to construct coherent and understandable phrases and sentences.

2. **Spelling:** The correct spelling of words, including the proper use of upper and lower case.

3. **Punctuation:** The proper use of punctuation marks, such as commas, periods, semi-colons, and question and exclamation marks.

4. **Style:** The set of rules and conventions used to write in a particular genre, tone, or writing style.

5. **Structure:** The organization and arrangement of text elements, such as paragraphs, headings, and subheadings.

6. **Vocabulary:** The words and terms used to communicate the message of the text. In the case of writing technical academic scientific documents, they must be easily understandable.

7. **Coherence and cohesion:** The way in which the ideas of the text are related and connected to each other, so that the message is clear and easy to understand.

All these characteristics are necessary for effective writing of a text. If they are combined properly, the result will be a well-written, coherent and cohesive text, free of grammatical and spelling errors. So, it is important to conclude that: a) text composition refers to the process by which written texts are produced, b) this process involves the transformation of ideas into a coherent and cohesive text that can be understood by the reader. These skills (argumentative quality of a text and clear, precise and concise writing) determine different levels of skills that are

determined by the understanding of the text composition process. Cassany summarizes the contributions that this author has made on the acquisition of written code as follows:

1. **The comprehensible input hypothesis:** Krashen maintains that the process of language acquisition occurs naturally and spontaneously when the learner receives a kind of *sudden understanding*, that is, using language that is easily understandable, emotionally satisfying, and a little out of touch. above your current level of competence, so it invites you to continue learning. It is a kind of positive feedback about what needs to be corrected to improve.

2. **The affective filter hypothesis:** Krashen argues that second language learning can be hindered by affective factors, such as anxiety, motivation, and self-confidence. In the context of written code proficiency, anxiety and lack of confidence can interfere with a learner's ability to express themselves in writing.

3. **The monitor hypothesis:** Cassany (1989) interprets and adapts Krashen's hypothesis on natural language acquisition and proposes that written code competence develops through two different processes: natural code acquisition and conscious learning. Conscious learning refers to an individual's ability to use the rules of Grammar and Spelling intuitively and deliberately to produce correctly written text. It is the metacognition of the act of writing.

SPEAKING IS NOT THE SAME AS WRITING

Between speaking and writing there are marked cognitive differences that have to do with the conventions of language, the duration and registration of the message, as well as the cognitive processes (attention, memory, imagination) involved in the production of a clear and effective text. The difference between written code and text composition is that the former refers to the rules and conventions that must be followed to encode information in the form of written text, while the latter refers to the process (the creative part). through which written texts are produced. That is, text composition involves the application of written code, but it also involves other skills and strategies, such as the aforementioned planning and revising, that are not directly related to the conventions of the written code itself. The differences are based on the following.

1. **The level of formality.** Writing is generally considered a more formal means of communication than speech. Therefore, there are differences in the conventions of Grammar and the vocabulary used in both media. While the act of speaking is more free, spontaneous and less structured, writing requires greater attention to the organization of ideas and the selection of words.

2. **Writing is more durable than speech:** Speaking is an ephemeral act and the message is lost once it has been said, however, writing is recorded and can be reviewed and evaluated later. Therefore, writing requires greater attention to grammatical and spelling correctness so that the message is clear and effective.

3. **Writing requires greater cognitive effort:** According to Cassany (1993), writing is more complex and requires greater cognitive effort than speaking.

Writing involves advance planning, greater attention to the organization of ideas and word selection, and careful review of the text to ensure that it is clear and effective.

THE ART OF WRITTEN COMPOSITION IN THE WRITING PROCESS

Cassany's contributions to describing the art of text composition include the importance of reading, the relationship between thought and language, the cognitive process of written composition, and the balance between creativity and imagination. These contributions allow us to understand factors that influence writing competence and provide tools to improve the ability of writers to compose texts. Regarding reading, Cassany points out that it is a complex process that involves the interaction of different levels of processing, such as visual perception, phonetic decoding, semantic understanding and inference. Regarding the act of writing, the writer approaches it from the perspective of planning, drafting and revising as key stages in the process of producing a text. He points out that planning is essential to organize ideas and establish a clear purpose for the text, while drafting allows you to put those ideas on paper and structure them appropriately. Revision, for its part, involves correcting grammatical and spelling errors, but also improving the coherence and cohesion of the text. Cassany summarizes the writing process consisting of the following stages.

- **To plan.** In the planning process, writers form a mental representation of the content that will be included in the text. This representation does not have to be only in the imagination, it must be concreted, let's say, with the elaboration of a sequence of ideas or concepts in a figure, such as a process map. It is also helpful to use an outline or table of contents. The elaboration of this representation contains three subprocesses: generating ideas, organizing them and formulating objectives. So, this stage consists of establishing a global vision of writing and organizing ideas in a logical and coherent way, in such a way as to achieve what you have planned to write. During organization, the author separates the main ideas from the secondary ideas and decides the order in which they will appear in the text. With this activity the other important rule in the composition of a text is fulfilled, coherence.

- **Write.** In this process the writer transforms the ideas he has generated into language that is understandable to the reader. The writer will have to convert the table of contents into written language, intelligible and attractive to the reader. With the writing process, the ideas that make up the previously established plan on what you want to communicate are expressed.

- **Examine.** In the process of examining, authors consciously decide to reread everything they have previously planned and written. Therefore, not only are the ideas and sentences that have been written are examined, but it is also verified that the objectives developed in advance are met. The review can have different purposes: it can be a starting point to modify previous plans or to generate new ideas and it can also be an evaluation or revision of the text. It consists of reviewing and correcting the text to improve its clarity, coherence and cohesion, with the use of connectors and conjunctions and other grammatical elements. Grammatical and spelling errors must be corrected, and verify that the structure of the text conforms to the

previously established table of contents.

- **Monitor.** The function of monitoring consists of controlling and regulating the actions of all these processes and subprocesses during the composition of the text. For example, it determines how much time is necessary for a writer to generate ideas and when he or she can move on to the writing process, or when it is appropriate to interrupt writing to check both the content, the cohesion between paragraphs, as well as the coherence between all parts of the document. Acting as a monitor involves making a final review of the text to ensure that it meets the writing objectives and the expectations of the recipient, who may be diverse, such as students in a special course, a presentation, a conference or a research article. or scientific dissemination. It must be evaluated whether coherence and cohesion has been achieved in the text and whether the message has been transmitted effectively (Casanny, 1989, pp. 125 – 128).

METHODOLOGY

METHODOLOGICAL AND CONTENT GUIDE FOR TRANSVERSAL TRAINING OF WRITING SKILLS

Before presenting a series of workshops that can be applied in various transversal subjects during professional training, it is necessary to analyze the process of constructing the final report of the professional residency. We take this topic because writing this document and its final approval by the internal advisor is crucial to being able to complete the training cycle at TecNM. Figure 3 describes this process.

The document developed to describe the writing process of an academic project such as a professional residency project has the methodological structure of a research protocol, which must be carried out in the second unit of the Research Workshop I subject. This subject is complementary to the subject Research Fundamentals and is taken mid-career in all the study plans offered at TecNM. These two subjects are linked to two subsequent subjects, Research Workshop II and Project Formulation and Evaluation, which together form part of the degree model. In this work, it is proposed that the review, for approval of the professional residency, be given the follow-up that is summarized in the left part of Figure 3.

As can be seen, the writing of this report, like the scientific method, begins with *defining the problem to be addressed*, which means that the problem must be posed and its respective formulation written, followed by writing the purpose, establishing the relationship between the research questions and the objectives, through the identification of measurement variables, or observation and data recording, if it is a qualitative research project.

Next, the justification must be written and link this argumentative text with the importance of solving the problem, basing the research protocol with the theoretical framework. Writing all these elements involves reviewing, analyzing and interpreting relevant information, which generally requires the construction of relevant ideas in worksheets, which must be included in the three sections that characterize the writing of the theoretical framework: background, referential framework and conceptual framework. The writing of the methodology requires that there be congruence between all the previous elements, so that the results to be achieved in the project are methodologically supported.
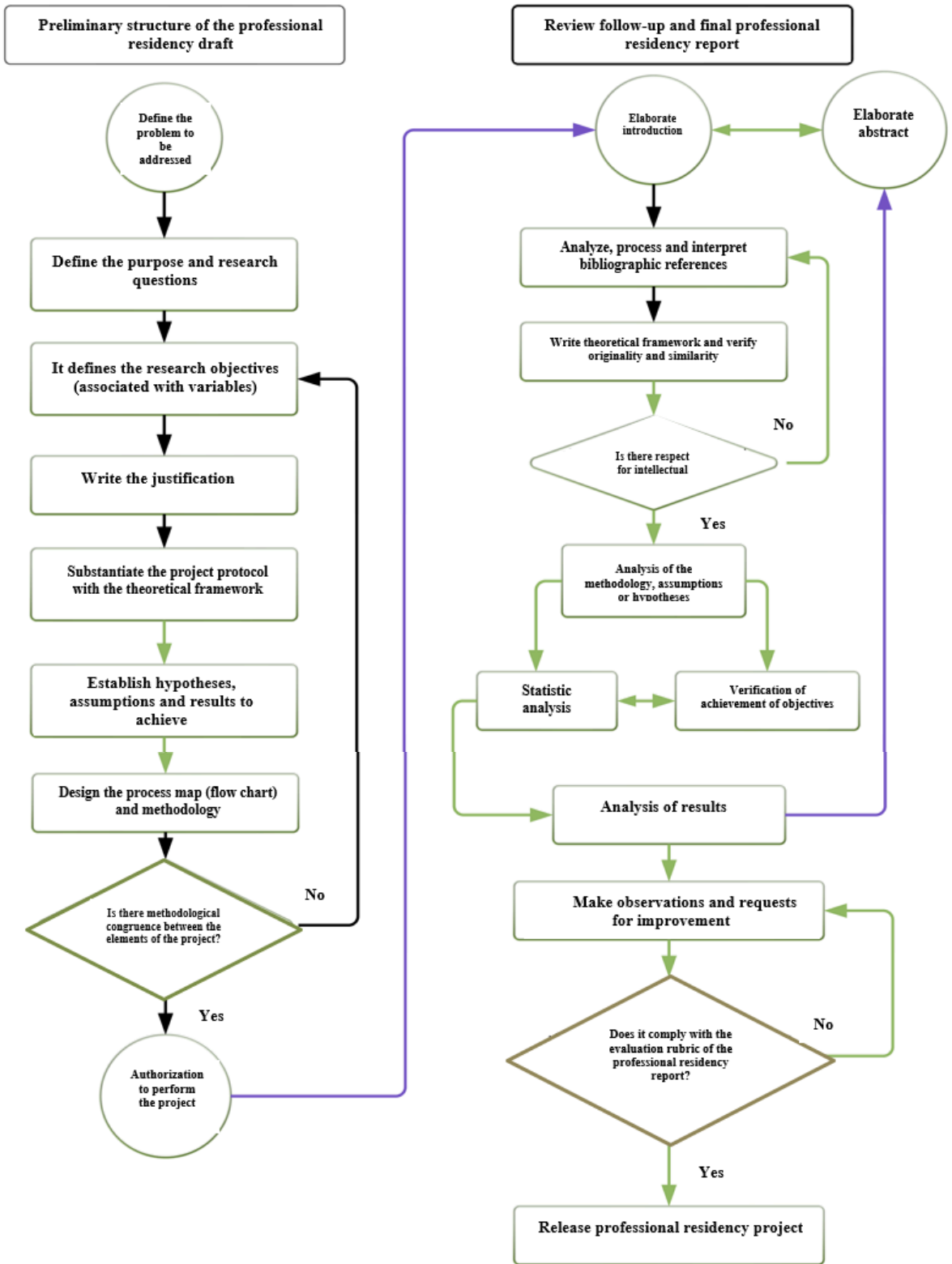
Figure 3. Process for writing the final professional residency report. Own elaboration.

The right part of Figure 3 corresponds to the writing of the final report of the professional residency or research project. As can be concluded, all stages have writing in common, so it is necessary to know and apply the cognitive processes on writing that we have indicated. Therefore, it is important that this skill be built in a transversal training process in various subjects of the curriculum. From now on we are going to describe some workshops that can be adopted during the training process.

READING AS A WRITER WORKSHOP

Cassany (1989) lists four reasons that support the strategy of *reading as a writer* to learn to acquire written code. When reading as a writer, you are aware of the way in which various authors have their writing models, so you can analyze and copy those strategies that adapt to our way of writing. In reality, you have the opportunity to make this point when you read and synthesize the ideas of the authors that have been taken as a reference, to theoretically base the work that you want to communicate in writing. This workshop aims to:

1. **Stimulate critical thinking.** When reading as a writer, attention is focused not only on the content but also on the structure of the text, the way it is written, its simplicity and clarity, as well as the aspects of meaning and intention that the author wants to communicate.

2. **Develop the observation capacity.** Attention is focused on the details of writing, on rhetorical devices, on the choice of connectors, conjunctions and prepositions to give cohesion to the ideas of a paragraph. Consideration must also be given to the way in which subordinate phrases are used to clarify an idea or to emphasize it from various points of view and

3. **Encourage creativity in writing.** When reading as a writer you can choose a particular style and then practice to develop your own style. This involves consciously activating creativity and innovation in the way we write, in order to improve our writing ability.

4. **Write documents that summarize what you want to communicate.** Critical reading of scientific articles prepares us to acquire experience in writing scientific academic texts, not only in methodological structure, but it is also an opportunity to compare writing styles, with which we can acquire our own.

The structure of this first workshop, *reading* as a *Writer*, can be replicated in several subjects, let's say where it is necessary for the student to construct an essay, make a report on laboratory practices or make a monograph on a specific topic. Only adaptation to the theme would be required. In this case we are going to develop the *research problem wording* on the topic of manufacturing lithium batteries. The strategy is the following

1. Provide participants with a variety of literature related to lithium battery design, such as scientific articles, technical reports, and other research studies.

2. Participants will read selected research articles actively and analytically, paying attention to specific elements related to clarity and precision of writing. Some key aspects to consider may include the structure of the text, the use of technical terminology, and the coherence of all the elements that make up the research article.

3. Teachers will organize a group discussion to analyze and delve into the writing techniques used in the selected texts. Aspects such as the structure of the paragraph, the relevant introduction and

conclusion related to the topic, the use of appropriate citations and references can be addressed, making a written report on the coherence of the ideas that are integrated into the analyzed document.

4. Students will perform writing exercises where they will apply the techniques and characteristics previously identified. They can write paragraphs or short sections of text related to formulating research problems on lithium battery design.

5. After writing practice, participants will exchange their texts and conduct a peer review. The constructive exchange of ideas and suggestions will be encouraged to improve the clarity and precision of the statements. Subject teachers will also provide additional feedback and advice for improving writing, considering their point of view in the analysis of the article or document under review.

The results to be achieved in this *reading as a writer workshop* are

- Participants will develop critical analysis skills by reading scientific or technical texts related to lithium battery design.

- They will identify and understand the key characteristics of effective writing in the application field.

- They will be able to apply identified techniques and characteristics in their own writing practices, improving the clarity and precision of their ideas, sentences or propositions.

- They will learn to review and offer peer feedback to improve the quality of their texts.

- They will become aware of the cognitive processes involved in the composition of the text and will be able to apply metacognitive strategies to gradually improve their writing.

BASIC GRAMMAR WORKSHOP

The objective of this workshop is to present in a clear and concise manner the fundamental elements of Grammar, such as the parts of speech, sentence structure, verb tenses, pronouns and adjectives, among others. In addition, the workshop provides clear explanations and practical examples of the most important grammar rules. This includes the proper use of tenses, gender and number agreement, the formation of plurals, the use of prepositions and other essential grammatical aspects. The following examples of grammatical elements are to support this workshop. The examples to be developed are based on research protocol topics that can be adapted to different problems of interest in the subjects of Research Workshop I and II.

SENTENCE STRUCTURE

The basic structure of a sentence in Spanish *consists of a subject, a verb, and a predicate or complement*. The subject is the one who performs the action, and the predicate expresses the action or state of the subject.

Example: Young adults with diabetes experience a variety of emotional effects.

- Subject: "Young adults with diabetes"

- Verb "experience"

- Predicate: "a variety of emotional effects"

Nouns: They are words that are used to name people, (Alberto); places, (the city of Tepic) things, (the spinning top) ideas, (collaborative learning), etc. In writing the theoretical framework on the emotional effects of diabetes in young adults, you can find nouns that describe different aspects of the disease and related emotions.

Example: "Diabetes has a significant impact on the quality of life of young adults."

- Nouns: "diabetes", "the impact", "quality of life", "young adults"

Adjectives: They describe or modify nouns, providing additional information about them. In writing the context of the emotional effects of diabetes in young adults, adjectives can be used to express emotions or qualify the effects.

Example: "Diabetes can cause feelings of anxiety and depression in affected young adults."

- Adjectives: "feelings", "anxiety", "depression", "affected young adults"

Verbs: They indicate an action, a process or a state. In writing the theoretical framework, verbs can be used to describe actions that occur in relation to the emotional effects of diabetes in young adults.

Example: "Research shows that diabetes influences the emotional perception and management of young adults."

- Verbs: "demonstrates", "influences", "perception", "emotional management"

Pronouns: They are used to replace nouns, avoiding unnecessary repetition of them. In writing the theoretical framework of the topic of diabetes, to support the conceptual framework, pronouns can be used to refer to young adults with diabetes or other elements mentioned above.

Example: "Diabetes can have a lasting impact on your emotional well-being."

- Pronoun: "their" (replaces "young adults with diabetes")

Correct use of verb tenses: It is essential to correctly express actions and events in the theoretical framework. It is necessary to ensure that the appropriate tenses are used to talk about past, present or future events. Below, examples of the correct use of tenses, verbal and nominal agreement, use of pronouns and punctuation are developed, with examples in writing the theoretical framework on the emotional effects of diabetes in young adults.

Example: "Previous research has shown that young adults with diabetes experience a higher incidence of emotional disorders."

- Use of the verb tense: "they have demonstrated" (present perfect) and "they experience" (present indicative).

Verbal and nominal agreement: This refers to the fact that the verb must agree in number and person with the subject of the sentence. On the other hand, nominal agreement is related to the fact that nouns, adjectives and pronouns must agree in gender and number.

Example: "The emotional effects of diabetes significantly affect the quality of life of young adults."

- Verbal agreement: "affect" agrees with "emotional effects" and "young adults" (third person plural)

- Nominal agreement: "quality of life" agrees in gender and number with "affects" (feminine singular)

USE OF PRONOUNS

Pronouns are essential to avoid unnecessary repetitions and improve the flow of the text. Use appropriate pronouns to refer to the nouns mentioned previously.

Example: "Diabetes can cause anxiety and depression in those who suffer from it."

- Use of pronouns: "those" refers to "young adults with diabetes"

PUNCTUATION

Proper use of punctuation helps to structure and clarify ideas in the text. Correctly use punctuation marks, such as commas, periods, and semi-colons, to organize sentences and facilitate reader understanding.

Example: "Diabetes, a high-impact chronic disease, can generate a series of emotional effects; for example, anxiety, depression and stress."

- Use of punctuation: the comma after "Diabetes" and "emotional effects" separates ideas and the comma after "for example" indicates an enumeration.

FUNCTION OF CONJUNCTIONS AND CONNECTORS IN THE COHESION OF A TEXT

Conjunctions and connectors are elements that are used in Grammar to join sentences, phrases or words. This helps maintain cohesion in the written composition, in a fluid, understandable and pleasant way to read. However, there are some differences between them. The differences between conjunctions and connectors are based on:

- *Conjunctions are words that are used to join two elements of the same grammatical category*, for example, two nouns, two verbs, two adjectives, two adverbs, etc. Some examples of conjunctions are "and", "or", "but", "because", "if", "when", among others.

- *On the other hand, connectors are words or expressions that are used to join ideas, paragraphs or sections of a text*, in order to achieve coherence and cohesion in writing. Some examples of connectors are "therefore", "in addition", "however", "in the first place", "in conclusion" among others (Moliner (2013), RAE, 1999).

Conjunctions can be divided into coordinating and subordinating conjunctions.

It is important to keep in mind that coordinating conjunctions are used to join elements that have a similar relationship and, in general, they are placed between the elements they join, separating each element with a comma (Moliner 2012, Serafini, 1994). It is important to keep in mind that subordinating conjunctions are used to join a subordinate clause with a main clause, establishing a dependency relationship between them. Examples of subordinating conjunctions. Feedback situations are used for young students of Research Workshop I, when they presented the progress of their research protocol.

1. **Yes:** used to introduce a condition:

"If the hypothesis is confirmed, then Theory X can be considered valid."

2. **As:** used to establish a comparison or example:

"Theory X, as mentioned above, focuses on the influence of the physical environment."

3. **Although:** is used to introduce a contradiction or an exception, for example:

"**Although** Theory X has been widely accepted, some studies have found contradictory results."

4. **While:** is used to introduce a comparison or difference, for example:

"While theory X focuses on aspects related to the organoleptic properties of foods, theory Y focuses on heat transfer aspects of drying."

5. **When:** used to introduce a temporal relationship, for example:

"When Theory X is applied in the proper context, consistent results have been obtained."

In the same sense, connectors are words or expressions that are used to join ideas in a

text and establish relationships between them. The use of connectors allows for more fluid writing and favors the understanding of the texts and serves

1. To introduce the topic:
   - This project aims to investigate.
   - The following research work addresses…

2. To add information:
   - Furthermore, it is important to highlight that…
   - It is worth mentioning that…
   - On the other hand, it must be noted that…

3. To continue the speech:
   - In this sense…
   - In addition…
   - Therefore…

4. To make comparisons or establish relationships:
   - Unlike…
   - In comparison with…
   - Similarly…

5. To conclude or summarize:
   - In conclusion…
   - In summary...
   - In conclusion…

Connectors are words or expressions that are used to join ideas in a text and establish relationships between them. The use of connectors allows for more fluid writing and promotes understanding of the texts. Some examples of connectors and their use in sentences are:

Addition: used to add information to what has already been said.

- **Also:** I like to write. In addition, it helps me feel satisfied and gain competitiveness.
- **Also:** I like football. I also do a stationary bike. Oh, and I'm going to Cruz Azul!

- **Likewise:** I like music. Likewise, I like to play the guitar, but I don't sing.

Contrast: used to show differences between two ideas.

- **But:** I like chocolate, but not as much as tepache.
- **However:** I like chocolate; However, I try to combine my taste for coffee as well.
- **Although:** Although I like pizza, I prefer vitamin T, (tacos, cakes, tlayudas, tlacoyos, tostadas, tepache, " tipilín " tamales, tortilla chips, tamarind, thyme, grapefruits, tejuino, tinga tacos…).

Concession: used to acknowledge a fact contrary to what is being said.

- **Despite:** Even though I hadn't done the Workshop I homework, I started watching the Korean series... And it was worth... an incomplete grade!
- **Although:** Although I don't really like the cinema, I go from time to time, so that my friends can see me, what if…
- **No matter how much:** No matter how much I study, I don't pass the exam.

Cause-effect: used to indicate a cause and its effect.

Why: I didn't go to Workshop I because I was tired and the teacher was going to notice.

Because: I couldn't go to Statistics classes because I got sick.

Therefore: I studied hard to write the theoretical framework correctly and, therefore, the teacher congratulated me.

Sequence: used to show a sequence of events.

First: First I get up early and then I take a bath.

Afterwards: Then I take a shower and have breakfast very early.

After: Then I get dressed and leave the house to catch the bus at…,

USE OF CONNECTORS AND CONJUNCTIONS TO STRENGTHEN COHESION

Let's look at some examples of conjunctions in the development of the theoretical framework, so that the articulation of ideas is presented in a clear and precise manner. Let us remember that the theoretical framework is developed with the purpose of providing a conceptual context for the study **and, therefore**, it must include an exhaustive review of the existing literature on the topic.

- Special attention must be paid to the selection of the theories and concepts that are included in the theoretical framework, since these must be relevant to the research problem posed.

- Once the appropriate theories and concepts have been selected, their analysis and synthesis must proceed, **in order** to identify the relationships and connections between them.

- **From** this synthesis, a solid theoretical basis for the study can be established and the hypotheses that will be tested in the research can be defined.

- **In conclusion**, the theoretical framework is an essential component of any research and its construction requires the rigorous application of the principles of selection, analysis and synthesis of relevant literature.

WHAT ARE PREPOSITIONS AND HOW ARE THEY USED?

Prepositions are words that are used to relate two elements of a sentence, indicating the relationship of *time, place, manner, cause, purpose, among others.* Prepositions are invariable words that are always written the same and do not change shape depending on gender or number (Moliner, 2013). Some sentences about this type of grammatical element are

1. **Time prepositions:**

Before writing the popular science article, an exhaustive bibliographic review was carried out.

During the development of the theoretical framework, the main theories and theoretical approaches related to the research topic were identified.

Since the publication of the first studies on the topic, various theoretical perspectives have been developed.

2. **Prepositions of place:**

on which the research is based is established.

The theoretical framework is located **at the beginning** of the research report. Sometimes identified with Introduction or background

Based on the theoretical framework, the research hypothesis can be defined.

3. **Prepositions of manner:**

The theoretical framework was developed **through** a systematic review of specialized literature.

The theoretical framework was built **with the purpose** of theoretically substantiating the study.

critical literature review methodology was used to build the theoretical framework.

4. **Prepositions of cause:**

The theoretical framework was developed **due** to the need to theoretically base the study.

The construction of the theoretical framework was carried out **due** to the lack of previous studies on the research topic.

The theoretical framework was built due to **the importance** of theoretically substantiating the research.

5. **Purpose prepositions:**

The goal of the theoretical framework **is to provide** a solid theoretical foundation for the research.

The theoretical framework is developed **with the purpose** of identifying the main theories and theoretical approaches related to the research topic.

The theoretical framework is built **in order** to justify the need and relevance of the research.

SUBORDINATE PHRASES, TO STRENGTHEN THE CLARITY OF THE SENTENCE

Clarity and concision are essential elements in an academic or scientific text. To do this, subordinate phrases are used *to support the main idea, to expand its meaning or to explain it in another way*. As can be read in the Manual of New Spanish Grammar (Española, sf) a subordinate phrase is a grammatical construction that depends on another phrase (the main phrase) to assign a more complete meaning to the idea being developed. The subordinate phrase generally fulfills a syntactic function within the main phrase, such as subject, object, complement, among others. Let's look at some examples of subordinate phrases that can be used in the construction of the theoretical framework:

1. "Although various theories have been proposed to explain the phenomenon of supply chains, *there is still great uncertainty in the literature about its true nature and changes after the COVID-19 pandemic*."

2. "While Theory X is widely accepted to explain depression, *some recent studies question its ability to explain all the variables related to the topic*."

3. Since there is a wide variety of studies on the topic under study, it is important

to carry out documentary research, using the "*Systematic*" method. Review" (systematic review) of the literature to establish a solid theoretical foundation.

4. "While some authors argue that theory Y is more suitable for explaining diabetes, *other researchers suggest that theory Z provides a more complete perspective because it distinguishes between different types of diabetes*."

5. "Although research in electronic commerce has advanced significantly in recent decades, *there are still a large number of unanswered questions that require expanded research on the psychological bases of this type of purchases*."

Note the contribution to the clarity and/or complement of the idea thanks to the subordinate phrase, indicated in the examples with italics.

FUNCTION OF ADJECTIVES AND ADVERBS

Adjectives are words used to modify or describe nouns or pronouns. Adjectives can indicate characteristics such as size, shape, color, texture, personality, nationality, among others (Moliner, 2013). For example, in prayer.

> "The big dog ran through the park." The adjective "large" modifies the noun "dog," indicating that the dog is large in size.

In addition, adverbs are words that are used to modify verbs, adjectives or other adverbs. Adverbs can indicate characteristics such as frequency, quantity, manner, time, location, among others. For example, in the sentence:

> "The dog ran quickly through the park", the adverb "quickly" modifies the verb "ran", indicating that the dog ran quickly.

It is important to note that adjectives and adverbs are important parts of Grammar, since they add information and details to sentences,

allowing for a better understanding of the message you want to convey. It is important to note that when writing academic and/or scientific texts, adverbs must not be abused, because they must be written clearly and concisely, using precise and objective language to communicate the results and conclusions of the research. This is due to the following: Adverbs, being words that modify other elements in the sentence, *can add subjectivity and ambiguity to the writing*, which can make it difficult for other researchers to interpret and evaluate the work (Serafini, 1994).

Additionally, adverbs are often used to express value judgments or opinions, *which is not appropriate in scientific writing*. Instead, objective, verifiable data must be used to support the research findings. Let's see its use in writing the theoretical framework.

- It is essential to critically examine existing theories on topic X in order to establish a solid theoretical foundation.
- The author suggests that Theory
- The existing literature provides a large amount of relevant information on the topic of recycling, therefore, it is

necessary to synthesize this information effectively to establish an overview of the state of the art in environmental quality management.

WORKSHOP: ANALYSIS OF GRAMMATICAL, COHERENCE AND COHESION ERRORS

This workshop can be considered a complement to *Reading as a Writer*, since its purpose is to review a written document. At the same time that it is checked that there are no punctuation, typographical, accentuation errors and other types of grammatical errors, the structure of the paragraphs is reviewed, their logical cohesion in the argumentation of the ideas and with the structure of all the contents of the document. In the following sentences detected in the review of research protocols of the Research Workshop I subject, and in the Quality Management subject, it is pointed out that there is a grammatical error and how it can be corrected. In the sentences being reviewed there may be several grammatical structure errors in the text. The above is exemplified in the following table.

Editorial error	Error description	Comments to improve
"…so through the stipulated problem the quality of the service is harmed"	There is an error in grammatical agreement here. The subject of the sentence is "the quality of the service" which is singular, so the verb "is harmed" must be "is harmed."	Even the past participle verbal form must be avoided because it generates cacophony or unpleasant acoustic sound (stipulated, harmed). The past participle is the verbal form of irregular verbs that end in "do" (Serafini, 1994).
"…which blurs the principle of optimization instead of concentrating on the goal of greater productivity	Here there is an error in the construction of the sentence	The phrase must be rewritten as "it blurs the principle of optimization and does not concentrate on the goal of higher productivity."
"Therefore, based on the problems that were previously expressed in a mechanical workshop"	There is an error in grammatical structure and writing here.	The sentence must be rewritten as: "Based on the aforementioned problems, in a mechanical workshop…".
Although, it is necessary to understand that "There is no correct description to solve problems, the outcome of these depends on technicians, operators and humans, it is always a test"	There is an error in the construction of the sentence here. The conjunction "Although" is not used correctly in this sentence and must be eliminated.	Furthermore, the second part of the sentence is poorly written and must be rewritten as follows: "the outcome of these is always a test and depends on technicians, operatives and humans."
"The processes are designed to reduce the cost of the operation, prevent unnecessary actions, achieve an increase in productivity and the quality of the services provided with the objective of customer satisfaction, growth, and competitiveness in the market."	Sentence construction error.	The sentence must be divided into two, as follows: "The processes are designed to reduce the cost of the operation and prevent unnecessary actions. They also seek to achieve an increase in productivity and the quality of the services provided, with the objective of customer satisfaction, growth and competitiveness in the market."

FINAL COMMENTS

According to what Daniel Cassany points out about the writing process, it can be said that it is a communication situation where we start from a *rhetorical problem* in which the topic, the audience and the purpose of what we want to communicate are considered. The answer to this is the text that is produced as planned, considering the generation of ideas, their organization and the objectives that the writer has set. The product of the above is the writing of the text. Without a doubt, what was written does not necessarily represent the thoughts about what was meant and, therefore, revision is necessary. This consists of examining and evaluating what is written, with the idea of revising and revising, because it leads to what is written being more effective in what it wants to communicate. This involves monitoring the ideas that are articulated in each paragraph, considering the long-term memory that the writer has, that is, the knowledge he or she has about the reality of the topic, (the knowledge acquired in the literature review), the audience and their experiences on writing other related topics.

Regarding long-term memory, that is, what we know about what we want to write, its usefulness in the composition process, presents two interesting points. Firstly, it seems that the writer, when he resorts to memory to search for information, does not have to remember all the data one by one, but that a key word can open the doors of specific knowledge that he has stored and that he needs. In this context, it could be stated that if the acquisition of the written code happens in the same way as during the learning of a second language, writing can only be acquired through reading a topic and then practicing and practicing to communicate correctly. efficient, both in syntactic structure and meaning. In the same way that we acquire speech by listening to and understanding oral texts, we acquire writing by reading and understanding written texts. If reading is sufficient, learning is acquired automatically when practiced consciously using all the grammatical and textual rules needed to write.

In addition, the reading must have certain characteristics. First, the apprentice writer has to be motivated by reading, he has to have interest, or he has to read for pleasure. Second, as we noted before, the reader's attention must be focused on the content and not the form. If read this way, the reader will be able to systematize the written code and after a period of silence (which consists of leaving the written work for a while) the written expression will emerge naturally, new ideas will be generated and errors will be detected. grammar to be corrected.

CONCLUSIONS

The very complexity of the language makes the conscious and organized learning of *all* the linguistic rules impossible. There are many *and many more exceptions*. The enormous complexity of the Grammar of any language is another powerful argument for the hypothesis according to which linguistic competence must be acquired *by reading as a writer* and conscious learning, at best, can only provide a small contribution. Additionally, teachers do *not teach all the grammar they know* and the best students *do not learn all the rules they are taught*. Thus, the user can only use a small part of the grammar of the language (Krashen, 1984).

Cassany proposes that one of the best ways to improve written composition is by reading and analyzing texts by other authors, that is, *reading like a writer*. When reading as a writer, you pay attention not only to the content of the text, but also to the way it is written. That is, it analyzes how the author has used language to express his ideas and emotions, how he has structured the text, how he has

used different literary resources and how he has used language to create a specific effect on the reader. This deep and conscious analysis of written texts helps writers develop their powers of observation and better understand how language works. Reading then is a metacognitive strategy to learn to write. In addition, it allows you to learn from the best writers and acquire tools to improve your own writing.

Therefore, reading as a writer is a fundamental technique for anyone who wants to improve their written composition skills. By doing so, you can learn to write more clearly, concisely and effectively, which will help you better communicate the ideas and emotions you want to convey.

On the other hand, regarding knowledge and practice workshops as transversal training actions, the participation of groups of teachers who teach various subjects throughout the curriculum is required, so that training on the acquisition of writing is effective. Well, like many useful things, constant practice is required. Basic grammar workshops must include a variety of practical exercises so that participants can apply what they learn. These exercises may include tasks of completing sentences, identifying grammatical errors, constructing sentences correctly, and developing grammatical analysis skills.

RECOMMENDATIONS

specifically address in his book *"Describing Writing" the importance of rhetoric in the act of composing a written text*. This is perhaps because when planning his book Describing Writing he had already considered writing another text where he would address this topic. It is something that we cannot affirm, but reality suggests it because in 1993, the Anagrama publishing house published Cassany's text called the "*Kitchen of Writing*." In this book the author encourages us to think about the use of rhetoric, because it reminds us that language is not only information that must be communicated, but that in doing so, the objective is also to persuade and delight the reader.

Therefore, it is recommended to read this book if we are interested in acquiring the written code and incorporating in basic grammar workshops, the strategies on the structure of sentences and how they are incorporated into various types of paragraphs during the composition of academic texts., technicians and scientists. In this book (Cassany, 1993) he explains that rhetoric is made up of different elements such as argumentation, persuasion and emotionality, pathos and logos of Aristotelian rhetoric (Aristotle, 1990) that are necessary to write persuasive and effective texts. Cassany provides several examples and rhetorical strategies that can be used in writing, such as the literary figure of metaphor, antithesis, anaphora, or repetition. This helps persuade the reader to continue reading. In addition, the author also points out the importance of argumentation, intonation and pauses in rhetoric when the text is communicated orally, such as in keynote lectures or article presentations.

Regarding basic grammar workshops, it is important to resolve students' doubts and provide feedback: It is important that during the development of the workshops a space is provided so that students can ask their doubts and receive clear and precise answers. Workshop instructors must be available to provide individualized feedback and correct participants' grammatical errors. Likewise, the workshop must encourage participants to practice basic grammar outside the workshop environment. This may include recommending additional resources such as workbooks, writing skills websites, or mobile apps in the same vein that allow them to

continue practicing and strengthening their grammar skills.

It must be clear to the workshop instructors that this training on writing skills must be transversal, that is, the practice of acquiring written code must be included throughout the entire curriculum, in several subjects and in different semesters. Therefore, it is recommended that tenured professors ask students to practice text composition strategies, with the preparation of essays, practice reports, critical reading of research articles, monographs on topics of interest, among others. Only this way, with practice and the will to do so, can one hope to improve the ability to write technical or academic documents.

Finally, we also recommend incorporating the suggestions made by (Aristotle, 1990) in his work "Rhetoric," where he invites reflection and practice by defining the coherence of a text as the logical and ordered relationship of the ideas presented in a text. In relation to cohesion, he says that this characteristic of good writing helps us to ensure that the ideas presented are connected to each other, giving clarity and precision to the argument. He affirms this with two elements that are necessary. The first is order and logic; The second is the use of reason. By not complying with the above, the writing can cause confusion and lack of understanding of the reader, which would not achieve the planned objectives regarding the communicative intention of the writing. When writing, we want our arguments to generate learning and personal growth on the topic developed. It is the objective of this writing, and it is also an invitation to travel the path that leads us, gradually, to becoming successful writers.

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