



***La comprensión de textos académicos de contenidos nutritivos en
el proceso de enseñanza-aprendizaje***
***Comprehension of academic texts with nutritional content in the
teaching-learning process***

Yoanet Rojas-González; Yamilé García-Bonnane; Matilde Márquez-Lores

Universidad de Guantánamo, Cuba

Asociación de Comunicadores, Guantánamo, Cuba

Correos (s) electrónico (s)

yoanetr@cug.co.cu

yamilegb@cug.co.cu

matildemarquezlores@cug.co.cu

ORCID: <https://orcid.org/0009-0008-8546-2891>

<https://orcid.org/0000-0003-3542-4965>

<https://orcid.org/0000-0002-9045-8212>

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Resumen

La comprensión de textos académicos, en la actualidad resulta una temática bastante abordada por su importancia en los procesos formativos, sin embargo, en la escuela de oficios “Enma Rosa Chuy” todavía existen insuficiencias para su enseñanza-aprendizaje. Se plantea como objetivo ofrecer actividades de orientación didáctica para la comprensión de textos académicos de contenidos nutritivos en la escuela de oficios “Enma Rosa Chuy”. Se utilizaron métodos teóricos y empíricos, que permitieron sintetizar las fuentes más relevantes del tema investigado. La propuesta de actividades de orientación didáctica ofrece ayudas didácticas al profesor, como opciones estimulantes del pensamiento reflexivo para la comprensión de textual. Los resultados obtenidos demostraron que la propuesta constituye una vía esencial, que favorece la comprensión de textos académicos.

Palabras clave: Comprensión; Textos académicos; Contenidos nutritivos; Orientación didáctica

Abstract

The comprehension of academic texts is nowadays a subject that is quite often approached due to its importance in the formative processes, however, in the trade school "Enma Rosa Chuy" there are still

insufficiencies for its teaching-learning. The objective is to offer didactic orientation activities for the comprehension of academic texts of nutritional contents in the trade school "Enma Rosa Chuy". Theoretical and empirical methods were used, which allowed synthesizing the most relevant sources of the investigated topic. The proposal of didactic orientation activities offers didactic aids to the teacher, as stimulating options of reflective thinking for textual comprehension. The results obtained showed that the proposal constitutes an essential way, which favors the comprehension of academic texts.

Key words: Understanding; Academic texts; Nutritious contentses; Didactic orientation.

Introduction

Technical-professional education in Cuba is an inclusive education, and within it are the trade schools that are an option for the improvement of Cuban youth, since they are responsible for preparing them to be inserted, actively, in a society that prioritizes the development of science and technology.

That is why their specialization requires knowledge of academic texts related to their profession, for these reasons they must demonstrate mastery of this textual typology that will be of benefit in their future professional performance.

In this sense, the teacher of these schools should encourage students to develop skills that allow them to understand these academic texts, so that they develop the creative and innovative capacity to identify the difficulties that may arise in the exercise of the profession, so that they are prepared to offer viable solutions in correspondence with the changing conditions of life in society.

The teaching-learning of the subject Spanish-Literature in the Trade School acquires relevance, since it favors the comprehension of academic texts and consequently, the preparation of a motivated worker for the knowledge of his trade, and prepared to optimally exercise the work in his future profession.

In correspondence with the above, the insufficient preparation of students for the comprehension of academic texts of nourishing contents in the teaching-learning process is declared as a problem.

There are several researchers who have conducted research on the treatment of textual comprehension, among them are: (Manzano, 2000; Cassany. 2002; Roméu, 2007; Lorié, 2008; Domínguez, 2010; Moreira, 2015; García, 2019). All of them contribute to the preparation of teachers and students in textual comprehension. All this favors the teaching-learning process, especially in the subject Spanish-Literature.

Likewise, other researchers have made important contributions related to academic texts: (Burdiles, Tapia, & Arancibia, Castelló, 2003) and others. They consider that writing at different educational

levels implies learning to produce texts whose language is the academic discourse of the different subjects.

Therefore, the objective is to offer didactic orientation activities for the comprehension of academic texts of nutritional contents in the "Enma Rosa Chuy" Trade School, based on a practical contextualization in this Trade School, which will serve as a didactic-methodological tool with specific orientations for the teaching-learning of the comprehension of this textual typology.

Development

The teaching-learning of textual comprehension in Technical Professional Education

For this research we assume the concept of textual comprehension provided by Roméu (2007), when he states that:

...is a complex and dynamic process, during which the subject interacts with the text he/she interprets, through the application of cognitive and meta-cognitive strategies, which results in the exchange between the new information contained in the text and that stored in the mind of the subject, and enables the text to influence the reader, enriching or reformulating his/her knowledge, and the reader to attribute new meanings to the text from his/her inferences. (p. 12)

In the same way it agrees with the levels of text comprehension of Domínguez, 2010) intelligent, critical and creative, since, they constitute an indissoluble unit; they manifest in a logical, related and synthesized way the succession of the processes involved in textual comprehension, whose objective is aimed at extracting the necessary information to the learner to be employed in another context, which will contribute to the development of the cognitive and developmental independence of the learner.

According to Domínguez (2013), among the strategies that facilitate text comprehensions are:

Sampling strategy: It allows exploring the text (title, table of contents, abstracts, etc.), determining what it is about in a general way, which is its most important parts, what type of text it is and who the author is.

Prediction strategy: It allows anticipating ideas about the text, after examining it. Since the text is observed before reading, it is possible to make anticipations or form hypotheses about its content.

Inference strategy: During reading, we realize that there are things that the author does not say but that we can over-understand. Inferences allow us to complete the information, for which we rely on the knowledge we have about the subject, the time, the author.

Self-monitoring strategy: As we read, we try to verify if what has been understood is correct, for which we check the information obtained.

Self-correction strategy: It is the moment to rectify if the interpretation is wrong.

The abstract: It is the expression, both orally and in writing, of the fundamental ideas to which what is presented in any text can be reduced.

According to Quesada (2006), three general models have emerged from research related to the process of text comprehension that try to explain the procedures involved in reading: bottom-up processing, top-down processing and interactive model.

Bottom-up processing models: they consider that the comprehension process starts with the recognition of letters, syllables, words, sentences and the syntactic relationships established between them until the complete meaning is extracted. This process is linear and ascending, "it considers reading as a behavior whose acquisition is equivalent to the sequential and hierarchical learning of a series of visual discriminations".

Top-down processing models: explain the process in reverse, since they propose that the reader relies on the previous knowledge stored in his long-term memory about the subject and on his semantic and syntactic knowledge to anticipate or predict the information, a hypothesis that is confirmed or rejected as the reader progresses through the text.

The above models are complemented by the interactive model, i.e., they are integrated with it, and consist in considering reading comprehension as a product of the simultaneous interaction of the data provided by the text, of the knowledge of different types (cultural, historical, philosophical, social, identity, intellectual, political, scientific knowledge) that the reader possesses and of the activities he/she carries out during reading.

Based on the above, this research coincides with the interactive model, which not only complements the bottom-up processing model and the top-down processing model, but also highlights how the addressee interacts with the text, relying on his or her culture and the knowledge he or she possesses.

Academic texts

The research assumes the definition of academic text provided by (Cassany, 1988; and Teberosky, 2007), who consider it as "...literate practices that are carried out in the scientific community and that varies according to the specific dispositions that are configured in each one of them" (p. 263).

In Cuba other researchers address in their research address academic texts among them we can mention (Roméu, 2007; Domínguez, 2010; and Moreira, 2012). They all agree that the writing of academic texts is an activity that favors the dissemination and validation of research results among a specialized scientific community.

Characteristics of academic texts:

1. They are intertextual: they resort to other texts to support or validate their proposals or to refute or reinforce the conclusions of those texts.
2. They are produced in a specific context: they are produced in universities or research centers. These institutional contexts make up the "scientific communities" (which are the addressees of these works).
3. They communicate results. All scientific work communicates the results of a rigorous and systematic intellectual process of research or reflection on a particular object. Thus, each work is understood as a contribution to the thematic area in which it is framed.
4. They seek to persuade. They seek to convince about the validity of their results and the relevance of their contributions.
5. They are based on clear arguments: they are argumentative because they state the position (thesis) of the writer. In this sense, expository and argumentative discourses are combined.
6. They maintain a formal discourse. They differ from other texts and from colloquial spoken language. They are expressed in the third person and use theoretical terms specific to the disciplinary area.
7. They follow a logical order: the information moves from the general to the particular and from the known to the unknown. Texts present an orderly format with differentiated and logically consecutive parts.

Academic texts are structured as follows:

Introduction: it has relatively stable elements, which fulfill specific functions so that the communicative purpose is fulfilled. They have the following elements:

1. Description of the topic in which the text is framed: this operation allows inserting the subject matter worked on in a specific context of knowledge.

Indication of a gap in knowledge related to the topic or an unexplored aspect of it that the text tries to solve. When presenting the gap in the development of a certain topic, it is necessary to refer to what is already known about it, based on the reference to other texts that have already dealt with the area. In this way, it is revealed what is still to be developed or investigated.

3. Indication of a purpose of the text that guides its development, which may vary depending on the type of text being written.

4. The anticipation of how the information will be structured in the text: it allows the reader to have a visualization of how the information will be organized in the text. In this way, it functions as a support for reading and understanding the text.

Development: indicates how to organize the development of ideas. Among the aspects to take into account for the development writing are:

1. The development of the ideas should be in accordance with what was announced, this will allow each point to be developed in order to address the purpose stated in the introduction.
2. The information will be organized according to the textual typology.

Conclusion: the ideas are closed and scopes and projections of the developed thematic are established. It must contain:

1. A synthesis or recapitulation of the ideas developed in the text. This makes it possible to return to the purpose. It does not mention all the content, but briefly elaborates the main points.
2. According to the nature of what is written, it should present and emphasize the novel aspects developed in the proposal; indicate whether or not the purpose of the research was achieved and why; expose the usefulness of the concepts and methodology of analysis used; present possible limitations of the research and establish the scope of the research in relation to related phenomena.

According to the Manual of Nutrition and Dietetics (2013), texts with nutritional content "... are those texts whose contents express the nutritional value of essential macronutrients; proteins, fats and carbohydrates, micronutrients such as vitamins and minerals and energy values provided by the food" (p.8).

In general, the academic text is the writing of a text where specific contents of an area of knowledge are manifested, so the teacher must work coherently with each of these elements so that the student delimits well the components of the academic text so that he/she is prepared and can decipher clearly and accurately the message of what he/she reads.

1. Initial state of academic text comprehension at the "Enma Rosa Chuy" school.

To determine the initial state of comprehension of academic texts in the "Enma Rosa Chuy" school, an entry pedagogical test was used. The following indicators were taken into account:

- Identification of the explicit and implicit messages of academic texts of nutritional content.
- Formation of criteria, judgments and evaluations about the messages of academic texts of nutritional contents.

- Extrapolation of the messages of academic texts of nutritional content, based on their knowledge.

A pedagogical test was applied to a group of 13 students to verify the initial state of comprehension of academic texts of nutritional contents. The main deficiencies are: 41.6% (students) identified the explicit and implicit messages of academic texts of nutritional content; 38.4% (5 students) formed judgments, criteria, judgments and evaluations on the messages of academic texts of nutritional content; 31% (4 students) achieved the extrapolation of the messages of academic texts of nutritional content, based on their knowledge.

Once the instrument was applied, it was confirmed that the comprehension of academic texts of nutritional contents of the students in the school "Enma Rosa Chuy" is insufficient, so a creative proposal is necessary to allow a developmental learning where the students of this trade school become active subjects of the comprehension of academic texts of nutritional contents of academic texts of nutritional contents.

Didactic orientation activities for the comprehension of texts with nutritional content in the school "Enma Rosa Chuy"

Didactic orientation activities according to (Moreira, García, and Cisneros, (2021) "...consist of didactic actions, developed by the teacher, based on the aids required by the students, for the acquisition of knowledge and decision making in the teaching-learning process" (p.7).

In this direction, it is up to the teacher, in his role as mediator, to use stimulating options and levels of help that favor reflective thinking based on affective experiences and cognitive actions that lead to the expression of scientific and objective judgments and assessments, related to their interests and needs.

Example of activity:

Title: Nutrition

Objective: to understand the importance of nutrients by reading and analyzing an excerpt from the Manual of Nutrition and Dietetics for the mode of action in their future social practice.

Method: heuristic conversation, independent work.

Medium: teacher's voice, blackboard, selected text.

Evaluation: will be given quantitatively from the answers written by the students.

Teacher's guidelines:

1. Read the following excerpt from the Manual of Nutrition and Dietetics, by Ángeles Carbajal Azcona.

Nutrients are substances necessary for health that cannot be synthesized by the organism and therefore must be ingested through food and diet and whose deficiency will produce a certain pathology that will only be cured with the administration of the nutrient in question. Almost no food is constituted by only one nutrient and, on the other hand, there is no complete food for the adult man (the maternal milk is only a complete food for the newborn during the first months of life. After that it is no longer complete because it lacks iron, vitamin C and fiber). In short, all nutrients are widely and heterogeneously distributed in foods and can be obtained from multiple combinations of them. It is said that there is only one way to nourish oneself, but multiple and even infinite ways to combine foods or to feed oneself.

Intelligent level of understanding

a) What is communicated in the text?

b) Classify the above text according to:

According to its elocutive form: dialogical ____ expository ____

According to its function: informative ____ poetical ____

According to its style: official ____ literary ____

c) Select the unknown words in the text, look for their meaning through the context, if not possible, go to the dictionary.

d) Explain the concept of nutrients.

e) Why are nutrients substances necessary for health?

f) Extract the word that is most repeated in the text. Classify it as a lexical syntactic word class.

Critical comprehension level

g) Do you share the author's criterion when he expresses that "...nutrients are substances necessary for health that cannot be synthesized by the organism and therefore must be ingested through food and diet". Justify your answer.

(h) Argue the following expression, "Almost no food consists of only one nutrient and, on the other hand, there is no complete food for adult man."

Level of Creative Understanding

i) If you had the opportunity to discuss with your partner the need to know that all nutrients are widely and heterogeneously distributed in foods and can be obtained from multiple combinations of them, what would you tell him/her? Write it in a text, take care of the spelling.

After evaluating the guided activities, as an independent study of the previous class, the text presented in class is read silently, as many times as necessary, and then a model reading of the text is developed by the teacher.

4. Results obtained in the final state of the application of didactic orientation activities for the comprehension of academic texts in the 1st year of the IPA "Enma Rosa Chuy"

- In order to evaluate the proposed activities, the following was taken into account: the pedagogical exit test given to the students in relation to the established indicators:
- Identification of the explicit and implicit messages of academic texts of nutritional content.
- Formation of criteria, judgments and evaluations about the messages of academic texts of nutritional contents.
- Extrapolation of the messages of academic texts of nutritional contents, based on their knowledge.
- When evaluating the results obtained, in correspondence with the established indicators, it could be observed that:
- 92.3 % (12students) reached the identification of the explicit and implicit messages of academic texts of nutritional contents.
- 84.1 % (11students) were able to form criteria, judgments and evaluations on the messages of academic texts of nutritional contents.
- 77% (10 students) extrapolated messages from academic texts of nutritional contents, based on their knowledge.

With the application of the didactic orientation activities, it is considered that the process of textual comprehension has been favored, it is necessary for students' learning in order to allow them a better and greater understanding of the developing world.

Conclusions

The study made it possible to systematize the main referents of the comprehension of academic texts with nutritional content. The characterization of the initial state allowed revealing the main difficulties of the students in the comprehension of this textual typology. The didactic orientation activities became essential resources for their practical contextualization in the "Enma Rosa Chuy" Trade School. The evaluation of the proposal showed that it constitutes a solution to the problem posed.

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