

Cognitive independence from the teaching-learning process in the Speech Therapy career

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ABSTRACT

The proposal is the result of a doctoral thesis, which provides a theoretical systematization of cognitive independence and how to implement it in the teaching-learning process in a career in the specific case of the Speech Therapy career. It was developed in the period of 2015-2022 and takes a sample of 8 teachers and 22 students of this career. It was supported by theoretical methods such as the documentary study and the analysis and synthesis that allowed in a synthetic way to reach generalizations that can be socialized in other careers. The results were validated by means of methodological triangulation, allowing to demonstrate their novelty, pertinence and feasibility.

Keywords: Cognitive independence; Teaching-learning process, Speech therapy.

Introduction

The development of cognitive independence has always been a goal to be achieved in different societies through education, however, although the efforts are many at the present time this purpose has not been fulfilled.

The universities in its essence want to form independent men and women, for this it is necessary to perfect the methods and styles of work that break the traditional schemes, but sometimes they do not have the competent personnel for the same.

Hence, it is essential to change from the different scientific and methodological work functions that make perceptible in their daily life the cognitive independence in any circumstance.

For this reason, the present research identifies as a scientific problem: How to contribute to stimulate the cognitive independence of the students of the Speech Therapy career from the teaching-learning process?

For which it is conceived to offer the teacher of the career a conceptual systematization of cognitive independence and how to achieve it from a teaching-learning process flexible and developmental.

The sample consisted of 8 teachers of the Speech Therapy year group and 22 students of the second year of the career.

For the development of this research, different theoretical methods were applied (historical-logical, analytical-synthetic, documentary analysis); empirical methods (observation, interview, questionnaire, documentary review) and the mathematical-statistical method (percentage analysis).

Development

I-Cognitive independence in the Speech Therapy program

Cognitive independence in the teaching-learning process of speech therapy students is conditioned by the adequate relationship between activity and communication. The latter serves as a mediator for the activity to take place in the process and its development depends on the degree of independence with which the students achieve the planning and organization of the activity.

The problem of stimulating cognitive independence in the teaching-learning process has a social character, since it is a phenomenon that is present in the educational process and affects the integral and multifaceted formation of students in the contexts of action.

Cognitive independence allows the student to assimilate and objectify the specific contents of the course in order to interact with the other members of his learning group,

family or community, and in turn, to rework, transform and socialize his knowledge, habits and skills as part of his education for life with a meaningful and developmental character.

The meaningful and developmental character of the teaching-learning process in the Speech Therapy career has its basis in the contributions of Vigotsky (1988), when stating his law of the double formation of higher psychic processes, according to which he states that in the cultural development of the child every function appears twice, first at a social level, and later at an individual level, first at an inter-psychological level and then at an intra-psychological level. This law is important for the training of the speech therapist teacher, as he/she must know in the formation of the child's language how language is internally structured, its formation from the social contexts, the maturation of the organs involved in this process and its close relationship with thought, to subsequently proceed from its external manifestation with the intervention of the speech therapist for the proper use of language.

Human development is based on two distinct and interrelated processes: maturation and learning. The former prepares and conditions the latter, but learning stimulates and enhances maturation.

The speech therapy student should not be satisfied with speaking well: he/she should seek all ways to speak excellently and correct in others the language or communication disorders that may arise in his/her social environment.

II. Conceptual Systematization of Cognitive Independence

The study of cognitive independence as a gnoseological phenomenon is based on the dialectical-materialist theory of knowledge, which demonstrates the limitations of the metaphysical, contemplative and idealist postulates of pre-Marxist philosophers. Among its principles are: materialism, reflection, development and practice, which constitute guiding ideas that direct the activity of man in society.

That is why the dialectical-materialist theory of knowledge constitutes a fundamental reference for other scientific theories, as is the case of the theories of activity, communication and learning, so necessary to stimulate cognitive independence in people.

The conceptual assessment of cognitive independence leads to highlight the work of authors who stand out in this field. Among them is Rubinstein who defines cognitive independence as "the conscious motivation of actions and their foundation". Rubinstein (1967, p. 46) In this statement there is a marked emphasis on the motivational sphere of

the personality; however, the cognitive-instrumental is not discarded and the psychological prevails over the pedagogical.

For his part, Rojas (1978) states that independence is a personality quality characterized by two factors: first, by a set of means acquired by the individual. Knowledge, skills and habits, and secondly, by the relationships of individuals towards the process of the activity, its results and conditions of realization.

In this definition, the socializing aspect is stronger than the individual aspect, since independence is understood as a quality and not as a capacity, which limits the internal aspect of the individual as a bio-psycho-social being. Even so, to a large extent, this point of view is shared by the author of the thesis.

For Dubroc (1980), cognitive independence consists in man's capacity to formulate and solve cognitive problems with his own forces. In this sense, the internal prevails over external influences, which marks the influence of the biological factor over the social factor.

For his part, Majmutov (1983) understands cognitive independence as the existence of an intellectual capacity in the student and the development of abilities to divide the essential and secondary features of objects, phenomena and processes of reality and through abstraction and generalization to reveal the essence of new concepts.

This definition has the limitation that it only focuses the study on the student and does not take into account other socializing agents that influence the development of the personality in the different contexts where they work.

On the other hand, López (1997) considers cognitive independence as a quality of the personality that is essentially characterized by the mastery of a set of means, among which are included knowledge, skills and habits, and by the relationships of individuals towards the process of the activity, its results and conditions.

This definition goes beyond that of Rojas (1978) in that it does not conceive the set of means as two isolated factors, but as the mastery of this set as a whole, an aspect that coincides with the aforementioned author.

The researcher Lima (2001) states that cognitive independence is defined as the capacity to think and work with originality by oneself, as well as to overcome efficiently with methods the inconveniences that arise in the socio-educational process.

In the above definition, the author subscribes only to the act of thinking and does not take into account other qualities of the personality such as imagination and memory, which are so important to stimulate cognitive independence. He also emphasizes

working independently and gives little value to the external influence of the agents involved in the development of the individual.

When evaluating Carballo's (2010) definition, it can be seen that it conceives the development of students' cognitive independence in the teaching-learning process of the English language in the pre-university associated with the didactic elaboration of the learning task. Thus, it limits its scope to the pre-university level and only takes into account the learning task as one of the ways to achieve cognitive independence.

In the previous definitions of cognitive independence, it is identified as common elements that the capacity developed by individuals is assumed from the activity that it generates, both by the intellectual effort and the integral development of students in the teaching-learning process, which denotes the need to continue deepening this study from the different levels of education.

For the interest of this research, it is considered important to define the Stimulation of cognitive independence: as the system of influences used by the teacher to mediate between the teaching content and the cognitive performance of the student with the use of methodological didactic resources (RDM) that promote their independent performance in learning situations (Durán, 2015).

Teacher mediation is understood as the teacher's guidance and intervention to stimulate the cognitive independence of their students through the appropriate use of the components of the teaching-learning process, supported by didactic-methodological resources (Durán, 2015).

As cognitive performance of students the levels of motivation, assimilation and the use of levels of assistance for the realization of learning tasks taking into account what has been achieved, what remains to be achieved and what needs to be overcome (Durán, 2015).

As didactic-methodological resources to the teacher's procedure through the use of a system of material means or not that facilitate the solution of a given learning task with the cognitive independence that it demands from the student.(Durán, 2015).

In this definition it can be seen that it is:

1. It refers to a resource as a system, a category superior to that of the whole, which indicates a certain dispersion.
2. It refers to material or non-material means, which encompasses not only the physical, the palpable, but also the perceptible, the intellectual, the psychological.

3. It is pointed out that they make possible the solution of learning tasks independently, which demands and guarantees a greater preparation of the student when performing it.

In order to have a clear and precise idea of how these elements interact in the teaching-learning process, the orientation to stimulate cognitive independence must be taken into account.

II- Guidance for stimulating cognitive independence from the teaching-learning process

Guidance allows cooperative and participatory work in learning contexts in order to solve problems arising from the different contexts of cognitive performance, applying the knowledge and skills acquired in the teaching and learning process.

The teacher in his methodological action must keep in mind the following questions:

What is learned? All the human culture provided by society.

How is it learned? At this time teachers are introduced to the methods and procedures developers, which they address and prioritize:

- The problematic methods and the use of learning strategies: for their incidence in the development of the productive-creative activity and their use in the design of tasks.
- Metacognitive procedures: for their incidence in the preparation of teachers for the deployment of their metacognitive activity in the solution of the problem stated and their extrapolation to the design of learning tasks.
- Didactic developmental procedures: for their use in the design of learning tasks.

Under what conditions do we learn? This link has been designed to prepare teachers on the role of cooperative work, communication and its importance in the transition to other "Zones of Proximal Development", under the theoretical support of Vigotsky's historical-cultural approach.

- The analysis of the role of cooperative learning through consciously designed activities plays an important role in introducing knowledge of group dynamics that helps to create a favorable climate for learning.

How should be the treatment of the (non-personal) components of the teaching-learning process to achieve cognitive independence:

The teacher must show the student how to develop the orientation from the objective to the skills and knowledge necessary to achieve them, according to the degree of development achieved. He must not only declare them, but also arrange actions for the student to appropriate them and allow him to know the identification of the learning levels achieved and those still lacking, as well as to trace the steps to follow to achieve and overcome them.

In relation to the orientation of the objective, it is necessary that from the year group the specific objectives for the logopedic treatment are considered, such as: to establish, to automate and to generalize. The teachers of each subject should relate them to the contents they teach for the necessary integration with the specialty, which will favor in later years a good logopedic treatment.

As for the orientation of the **content**, it must be complemented by precisions on how to assimilate it, through the delimitation of the actions that the student performs independently. From this perception, the student must be able to know the extent of his knowledge, the insufficiencies and difficulties to execute any learning task for his profession or in the use of didactic resources for the solution of problems with and without help.

The content cannot be for the teacher a simple transmission of knowledge, skills, habits or values. It must be, on the contrary, a positive influence to develop and stimulate in the students the desire and the need for self-study, self-learning and self-preparation in such a way that allows them in their cognitive performance to develop independently in any context where they are (Durán, 2005).

A good content is not duly specified if it does not take into account the good use of methods that, in order to achieve cognitive independence, it is suggested to use productive methods, in a process in which the student must actively participate and obtain concrete results in practice and in theory.

These can be problematic or not, but they must have a certain dose of challenge for the student that conditions him to set his own goals and to strive to achieve them. Explaining techniques, analogies, dramatizations, multisensory learning, development of logical and divergent thinking skills, proposing and guiding independent work in correspondence with the system of teaching tasks so that it forms an articulated system with it.

On the other hand, whenever the conditions allow it, at the beginning, during or at the end of a task, it is important to assess how the students feel, what they expect to achieve

or what they achieved, how they are working, what methods and strategies they use, what is easier or more difficult for them; so that they learn to know themselves, self-evaluate and control their present and future performance, and take full advantage of reflection and work in teaching and special groups, in an appropriate balance with individualized work according to the interests and possibilities of each one.

Regarding the **teaching media**, the teacher must maintain a permanent self-preparation that allows him/her to use the media in function of the students' self-learning and learning. He/she should not act as a reproducer of the content, but should take into account the requirements for the selection, design, elaboration and use of the media so that the analysis, reflection and generalization of what has been learned can be propitiated through them.

Evaluation is the component that provides feedback to the process in all its aspects. It is necessary that the teacher performs, to a greater extent, actions for self-monitoring and self-evaluation of the learning process with the purpose of raising the students' metacognitive performance, as a consequence, an adequate awareness of their cognitive process. Such process must be carried out in a systematic and dynamic way; the teacher must guide and lead it with the implication of forming them as active, reflexive and conscious subjects during the control and evaluation of their learning and that of others, in addition to stimulating the process of regulation and self-regulation based on the current and potential knowledge of their students to reach higher levels in their learning and development.

In particular, it is necessary to emphasize the close and necessary relationship between all the components of the teaching-learning process, in order to promote the stimulation of the cognitive independence of the students of the Speech Therapy career from a flexible and developmental teaching-learning process.

Conclusions

The considerations discussed in this paper demonstrate the importance of work by competence for the care of students with dysarthria from the training of the speech therapist teacher, and the professionalization of the teacher in this specialty, from these foundations are also offered methodological criteria for speech therapy with procedures

and some examples of how to care for students with dysarthria, which will raise the quality from the training process of students in the Speech Therapy career.