Original article

Didactic study of relevant learning in the initial training of education

professionals

Karelia Díaz Jaime^{1*} https://orcid.org/0000-0002-7647-9033

Rosa Ana Jaime Ojea¹ https://orcid.org/0000-0002-4417-6935

Esther Céspedes Acuña¹ https://orcid.org/0000-0003-1397-4034

¹Universidad de Oriente. Santiago de Cuba. Cuba.

* Author for correspondence: <u>karelia.diaz@uo.edu.cu</u>

ABSTRACTS

The study carried out allows the didactic foundation of relevant learning of students in

pedagogical careers during initial training, using as a theoretical framework a set of

categories that were formulated for this purpose, but focusing on learning and its types,

as well as the relationship between what is learned and what is really needed. Studying

relevant learning is an alternative to examine and contextualize the ideas that the student

has about the teaching-learning process and how it is valued.

Keywords: Learning; Relevant learning; Principles of relevant learning.

Recibido: 25/03/2022

Aceptado: 12/07/2022

Introduction

The competences to be acquired by students (knowledge, skills, values) aimed at their professional training must guarantee the sustainability of their formative process in correspondence with the requirements of lifelong education, regardless of the mobility that knowledge must have in terms of practice and the contexts in which the subjects develop. One of the alternatives available to the formative process is precisely the deepening that must be carried out with respect to the potential of the theoretical and methodological treatment of relevant learning.

Relevant learning in exceptional social situations becomes a sort of response to this problem. At such times, students will only receive the knowledge that guarantees relevant learning or, in other words, the necessary and sufficient learning they need to successfully complete the academic programs. Therefore, during the preparation for employment or as graduate studies they will be able to deepen in other knowledge aimed at completing their preparation.

Derived from these epistemological reflections with respect to relevant learning and in correspondence with praxis and its manifestations, a perceptual factual diagnosis is carried out, which allows stating the following problematic manifestations:

- 1. Insufficient encouragement for teachers to use the different ways that privilege the learning experience of their students.
- 2. Low prominence of the student as the person responsible for his or her self-management in order to learn.
- 3. The knowledge imparted during the teaching-educational process continues to be repetitive and fragmented.
- 4. Not all the contents that students receive are relevant and related to current problems from the social and personal motivation of the learning subjects.

In order to determine them, the following were taken into account: results of validation reports of subjects, disciplines and careers, factual diagnosis exposed in research related to the subject, observation of students' performance in learning tasks, students' opinions, reports of teaching results and evaluative cuts.

The essential causes of this problem are:

- Several subjects of the study plan present repetitions of contents.
- The course does not guarantee for all students the conformation of a learning strategy in correspondence with their particularities.

- Some integrating tasks carried out in the course do not guarantee the integration of actions in correspondence with their intentionality.
- Dissimilar contents taught in the course are not essential for the students' future professional performance.

For this reason, it is declared as a research objective to elaborate a pedagogical strategy to guide the synchronism of the dynamics in the dual vision of relevant learning during the initial training of professionals from the essentiality of the contents.

Development

In order to refer to relevant learning during the initial training process of professionals, we must first take up the concept of higher education offered by Delors, 1996, who states that higher education is both one of the engines of economic development and one of the poles of lifelong education. It is both a repository and a creator of knowledge and the main instrument for the transmission of the cultural and scientific experience accumulated by humanity.

In the same way, with inescapable and valid character for higher education in Cuba, it is necessary to refer to what Edgar Morin (2000) stated when he referred to the seven essential knowledge that the educational system must face in order to become relevant and significant:

- 1. An education that cures the blindness of knowledge,
- 2. An education that guarantees relevant knowledge,
- 3. Teaching the human condition,
- 4. To teach the earthly identity,
- 5. To face uncertainties,
- 6. Teaching understanding,
- 7. The ethics of the human race.

With respect to this problem, it should be noted that the foundations of developmental learning declared by Vigotsky and his followers (2000) offer from the theoretical point of view an exact understanding of how this process should take place and indeed both

teachers and students of pedagogical careers show their mastery of its psychological and pedagogical foundations, however, neither the teachers as a whole systematically create a developmental environment, nor the students consciously assume its active and protagonist character since both lack the motivation to do so.

Developmental learning generates, from the very contradictions on which its existence is based, the inexhaustible need to learn and grow, and the psychological resources (cognitive, affective, motivational-volitional) necessary to achieve it.

This is why Castellanos et al. (2001) have stated that the main dimensions of developmental learning are the tendency to activate and self-regulate the processes involved in learning and the possibility of establishing a deep, personal and meaningful relationship with the contents being learned based on an intense motivation to learn that grows and is continuously enriched.

The problem arises because it is not considered that the knowledge transmitted in a learning activity must have a double structuring: it must be structured in itself and structured with respect to the knowledge possessed by the student. With regard to relevant learning, we start from what was stated by Ramírez (2009), Technical Vice President of the Colombian Private Competitiveness Council:

Relevant learning: it means to respond to the needs and expectations of the user, relevance implies the recognition of the conditions of each child or young person who accesses the system in order to serve them from their specificities, conditions that include their social and family environments, at the same time it means to respond to the needs and expectations of the environments, whether they are social, productive or family.

The search conducted in several documents on the Internet, including those of the United Nations Educational, Scientific and Cultural Organization, led to the following conclusions: relevant learning guarantees its sustainability over time, it has a differentiating character in correspondence with the particularities of the subjects, in this learning the value of practice is pondered in correspondence with the different contexts, it demands the access of parents to all information relevant to the learning objectives and the progress of their children, relevant learning must be accessible and useful and lead to learning results that students can use.

Common elements among the three are: the search for quality learning, the conscious participation of the subjects in their learning process, the planned and scientific nature of the learning process.

The term relevant learning in the Dictionary Spanish-English (2017) from various internet sites highlight that: a relevant and flexible learning environment needs to emerge in order to keep pace with new developments observed in society, relevant learning content that responds to real needs and demands, innovative approaches, for example, have made learning more relevant, enjoyable and effective, teachers' energy and imagination need to be unleashed to design inspiring and challenging learning for young people, a market-driven curriculum and development of strengthened and adapted materials for hands-on learning

Teachers develop materials for learning to be enjoyable and creative, and to increase capabilities, students want their learning to be well-founded and relevant, to enable them to access a better understanding, one of the challenges is to make learning more relevant and bring it closer to the real life of children and their future possibilities in correspondence with the context, the guiding logic of action in synchrony of the personal components of the teaching-learning process, part of recognizing the role of the teacher as a guide of the training process and the student as an active participant in this process.

For the author of this research, pertinent learning from an integrating vision is:

Relevant learning: conscious acquisition of necessary and sufficient knowledge through the teaching-learning process, which responds to the individual and social interest of students and teachers, supported by personological and didactic mechanisms that stimulate the active and generative participation of the participants, both for the transmission of knowledge and for its appropriation with a predetermined formative purpose.

In this theoretical construction it is recognized that learning is personal and is acquired by each individual in a conscious manner during the teaching-learning process, which is organized, planned and executed by the teaching institution with a social purpose, only in this way will the necessary and sufficient knowledge be acquired by each subject in a unique and unrepeatable manner in correspondence with his or her experiences.

Therefore, there must be a certain correspondence between what the teacher imparts with a legal character imposed by society and the individual interest of the students, for which both will be supported on the one hand by the personological mechanisms of the student and the didactic ones of the teacher to motivate him/her intrinsically according to the objective set, so that in a truly developmental environment the student can have

an active and protagonist participation in the appropriation of knowledge, some of which are transmitted by the teacher and others self-managed by the students themselves.

Relevant learning, by taking into account the user's needs, the personological conditions and the response to the needs and expectations of the environment, has a binary manifestation in the sense of the external and the internal. From the internal point of view, relevant learning must meet the following requirements: learning peculiarities of the subjects such as learning pace and learning styles, personal culture seen as the level of information and the way it operates, the preceding and concomitant knowledge and the possibilities of its subsequent application.

From the external point of view, relevant learning meets the following requirements: mastery of current social problems, non-academic treatment of the content under study, mastery of the problems of man and society.

However, in order to elaborate a system of principles for the management of the pedagogical process, it is necessary to take into account methodological criteria. In this regard, Fatima Addine Fernandez and a group of professors from the Department of Pedagogical Sciences. Faculty of Educational Sciences. ISP "Enrique José Varona" (2004) stated: constitute elements for the direction of the pedagogical process, determine the foundations of all actions that make possible their implementation by all teachers, the principles with their actions must in themselves be a different strategy that corresponds to the historical forms of our educational thought and by their way of expressing themselves, enable the creative application by all teachers and depending on the realities to be transformed and solved, consider the principles as regulators of the optimal functioning of all the components of the pedagogical process, based on the diagnosis made by teachers of their reality and the alternatives proposed to comply with the education of the personality.

Medina (2009) stated that "in order to make the meaning of knowledge more feasible , education should not deal exclusively with the cultural heritage of humanity, but also with the problems of man and society" (p.14). Disciplinary knowledge is not being disqualified, only the way in which its organization allows to address them is being questioned; consequently, the study of fundamental problems that promote or mobilize general knowledge is required, allowing interdisciplinarity and transdisciplinarity.

In order to answer these questions, the following rationale is offered:

- 1. The system of principles is based on the need to direct the theoretical logic for the study of relevant learning.
- 2. The system of principles that govern relevant learning is taken as a direct reference for the proposal of the system of principles that govern relevant learning, the one stated by the researcher Medina (2009): relevance in knowledge, general intelligence and essential problems, since in the bibliography consulted by this researcher no other proposals of principles were found and the enunciation of new proposals is considered necessary.
- 3. This process is governed by objective laws that were expressed by several authors in different ways and two of them are identified: The relationship of the school with life and the relationship between the components of the process. Both are applicable within the process under analysis.

The theoretical foundation that sustains it lies in considering the synchronism of interests between the teacher and the students in the teaching-learning process with a character of essentiality from which emerges precisely the dual character of the same. 4. The teacher maintains his character as a guide of the process, but must guide it in correspondence with the needs and particularities of the students with a differentiating approach. The student, for his part, has to become aware of his protagonist character within the teaching-learning process so that he also becomes responsible for determining the relevant learning that he needs not only for a given moment but also throughout his life.

5. The principles of pertinent learning influence the objective of education with emphasis on the higher level, in which integral formation is declared. The term in synthesis expresses the pretension of focusing the work of universities on the formation of values in professionals in a fuller way, providing them with qualities of high human significance, capable of understanding the need to put their knowledge at the service of society instead of using it only for their personal benefit. It also implies the need to achieve a creative, independent professional, prepared to assume his or her self-education throughout life; who is able to keep constantly updated, also using the opportunities offered by universities to serve the professional with a postgraduate education that responds to the needs of the country's development. Horruitiner Silva, Pedro (2007).

- 6. The need for the elaboration of principles arises as a response to barriers that limit relevant learning manifested in:
 - The repetition of content between subjects of the same discipline or between subjects of different disciplines.
 - The fragmented nature of the content that affects the integrative vision of knowledge.
 - Mismanagement of the multidisciplinary approach by not determining the meeting points either by cognitive nodes, by lines of integration or by professional problems.
 - Exaggerated complexity of the content without an adequate practical basis either in an immediate or mediate manner.
 - Knowledge lacking practical sense.
 - Knowledge alien to social and circumstantial problems.
 - Knowledge that does not solve or correspond to social needs and demands.

The system of proposed principles: pedagogical negotiation, differentiating approach to teaching activity, conjugation of the multiplicity of sources of knowledge, relativity between personal and social aspiration, keeps coordination relations with the system of principles proposed by Addine, Fatima (2002).

7. They are: principle of the unity of the scientific and ideological character of the pedagogical process, principle of the linkage of education with life, social environment and work, in the process of education of the personality, principle of the unity of the instructive, educational and developmental, in the process of education of the personality, principle of the unity of the affective and cognitive, in the process of education of the personality, principle of the collective and individual character of education and respect for the personality of the learner, principle of the unity between activity, communication and personality.

8. Correspondence relations are established between the content and the proposed system of principles, since the proactive character of knowledge is generated by the future needs to operate with it both in the field of knowledge and in the field of power. The qualitative-quantitative aspect lies precisely in the accumulation of knowledge that the student supposedly acquires in a necessary and sufficient manner to be able to solve the problems of his profession in correspondence with the complexities of the performance he will have in the various contexts.

These principles are related not only to the content but also to the methods that are used in the teaching-learning process in higher education. Active methods and group situations are an effective way to promote the participation of students in the process, raise their degree of personal involvement in the analysis, search for solutions and decisions taken individually and collectively, and in general, their degree of awareness and interest. Among the most widespread productive methods in higher education are: problem exposition, partial research, research, didactic games, case studies and thematic tables.

9. Based on these theoretical foundations, the hermeneutic keys that guarantee the understanding of the essentiality of the contribution offered by the theoretical construction carried out were elaborated.

The dialectical relationship between the individual and the social is objective and manifests itself whether or not it is declared in normative documents from both the gnoseological and methodological points of view.

- The dual vision of relevant learning manifests itself as a contradiction between social and personal interests that has to be resolved by both parties through a process of permanent coordination of interests between subjects.
- The motivation to teach and to learn constitutes the dynamizing element of this process and a guarantee for a developmental and translational environment from the social to the individual and vice versa, where both parties move from an initial state to a desired state.
- The individual and group psycho-pedagogical diagnosis determines the strategies for the performance of both subjects, the accurate elimination of barriers that limit this type of learning and the achievement of common goals.
- Practice constitutes the scenario where pertinent learning is valued when it requires students to operate with the knowledge acquired for the solution of the professional problems that arise.
- Learning has quali-quantitative manifestations in equal ranks and only the demands in the resolution of the problems that arise in the contexts of professional performance determine the supremacy of one with respect to the other. This does not deny that the changing social environment will require the incorporation of new knowledge, but having as a basis the knowledge already acquired, which will allow a participation in correspondence with the level of motivation that he/she has in this regard.

- 10. The level of generality of the principles of synchronism in the dual view of relevant learning is as follows:
 - Pedagogical negotiation: Negotiation is a form of conscious understanding between the teacher and the students that allows them to specify the objectives to be achieved in correspondence with common interests, their level of depth, as well as their applicability.
 - **Differentiating approach to teaching activity:** The differentiation of learning allows establishing levels of demands and levels of development, which guarantees the guiding character of relevant learning in correspondence with the academic year, systematic development that students are reaching and applicability of knowledge from the practical-theoretical relationship.
 - Conjugation of the multiplicity of sources of knowledge: It guarantees the
 participative and protagonist character of the student from the cognitive abilities
 developed for the access to knowledge with a metacognitive approach.
 - Relativity between personal and social aspiration: It guarantees the dialectic between the individual and the group, the flexibility and the circumstantial character of the process. All this is based on the role of the teacher as a guide of the process and in charge of regulating this process, taking measures in correspondence with the changes that take place and articulating these changes with the demands of the environment.

Discriminating selectivity of knowledge: This principle is one of the most important, since the selectivity of content is not exclusive to either the teacher or the student. It is society who demands it, it is the performance that imposes it, it is the teacher who creates it and it is the student who applies it. The conjugation of all these interests has as a result the learning belonging.

Conclusions

The study of relevant learning in the current conditions in which educational processes are developed is of great importance due to the need for the student to learn in a solid

way what is necessary and sufficient to operate with knowledge in the resolution of problems and learning tasks.

The perceptual factual diagnosis carried out with respect to pertinent learning in university students revealed problematic manifestations among which stand out the insufficient stimulation for learning, problems with student protagonism and insufficiencies in the teaching of contents.

The modeling carried out as part of the research allowed determining barriers, hermeneutic keys and system of principles that together with the determined subsystems and components allowed declaring the synchronism of the dynamics in the dual vision of relevant learning during the initial training of professionals.