DOI: https://doi.org/10.21501/2500-669X.2921

Editorial

Construction of school scientific knowledge: a reflection from the didactics on teaching of management sciences and organizational studies

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Forma de citar este artículo en APA:
García-Jiménez, M. D., y Cardona-Ocampo, J. E. (julio-diciembre, 2018). Construcción de conocimiento científico escolar: una reflexión desde la didáctica sobre enseñanza de las ciencias de la gestión y los estudios organizacionales [Editorial]. *Science of Human Action, 3*(2), 209-215.
DOI: https://doi.org/10.21501/2500-669X.2921

One of the latent problems in publications in administrative, accounting, and economic sciences, according to an epistemological position, management sciences and organizational studies is the distance in the reading of the products of scientific investigation arisen from the training processes and development of classroom in the pre-gradual programs. Besides, it has led to dimension a shift away from scholarly science with school science in this type of academic programs, generating a problem with thickening of the shelf and not noticeable growth of the scientific attitude, at the expense of the construction of academic programs in culture and the same knowledge from the student bases construction.

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DOI: https://doi.org/10.21501/2500-669X.2921

The concept of construction of knowledge is presented, among others, by Lugo-Morin (2010), who addresses the concept of construction of knowledge through an analysis of ideas and conceptualizations around the construction of knowledge in scientific communities by authors of diverse disciplines and philosophical positions such as Shaper, Kuhn, Durkheim, Goldman, García, and Piaget. Also, Lugo-morin who proposes the following definition of construction of knowledge:

> It is a discontinuous process that connects both the experience and the theory. It is located in different realities (given reality and constructed reality) according to the system of values that the individual has and who built it. Thus, the effectiveness of its interpretation will depend on whether the research subject is part or not of that reality (p. 74).

This concept not only problematizes but also allows a critical perspective of teaching in these academic programs, allowing exposing the construction of knowledge in academic communities and educational process. Educational process must be addressed from an appropriate scientific knowledge perspective and its relation to the place of the subject in the world, understanding that this knowledge is constructed from those edges that are already integrated into the individual's identity and which constitute the key elements of the way of understanding his/her own existence.

The learning community is not looking for a memorization of the contents that the teacher intends to be learned. On the contrary, its objective constitutes the justification of its existence and the commission of the question as an integral of the construction of the knowledge. The relation between these two concepts allows reaching important definitions on how to build knowledge in the classroom. Lugo Morin (2010) states two contexts in which the individual elaborates his/her knowledge: constructed reality and given reality.

The term given reality, according to Lugo-Morin's definition (2010) and based on Marcuse, it is which is configured through dominant social institutions, and it has a direct relation with the stance that teacher should take towards the teaching-learning process. It is an epistemological stance where theoretical contents are presented and they are essential not only in what is known but also how they are learned. Furthermore, it has relevance in the process through the theoretical contents procedures and methods to be acquired. For this reason, defining how they are constructed and how the cognitive content is built make the student aware of the social dimensions of knowledge and its continuous development (Acevedo-Díaz, Vázquez-Alonso, Manassero-Mas, y Acevedo-Romero, 2007, pp. 420-421).

It is necessary to bear in mind what has been previously mentioned above without forgetting that there is a constructed reality in the classroom, which as its name implies strong roots in the epistemological constructivism of thinkers such as Gregory Bateson or Alfred Shultz. They explain reality through which the student has been

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exposed all his/her life by means of social interaction as it is supported by Berger & Luckman (1988) in "The social construction of reality" in 1968. They mention there that student is able to construct his/her thinking, developing and communicating his/her arguments (Berger & Luckman, 1999, p. 37).

That is to say, although theoretical stance taken by teachers from the approaches is required for the construction of knowledge and the ideas emanating from the academic community, it is essential to understand that they exist in the classroom reality models that underline the students' previous knowledge.

These elements of relations between scholar scientific model-student allows determining that there is a relation between the developed knowledge by academic communities and the interpretation that is done with the purpose of constructing knowledge in the classroom. This aspect determines the concomitance between the students' learning process and the more refined concepts of the discipline that studies a contextualization and social application of it.

Scholar science is contextualized thanks to the interaction of two groups of subjects (teachers and students), which are related by a component that defines its objectives (Knowledge-savoirs). This construction is regulated by the teacher with the aim of his/her students build their knowledge and achieve a social application of it. In other words, it is necessary that student contextualizes what he/she tries to transmit the teacher through the participation in the learning community (Chavellard & Joshua, 1982).

The major obstacle facing the construction of scientific knowledge in school environments is currently a teachers and students' manifest unwillingness around scientific activity, forgetting the importance of research and science in the training process. These elements are also related to the timeliness of accounting education at the national, regional and international context.

Based on this description context, explanations have revolved around the motivational factor, indispensable part in the process of scientific training. Alonso Vasquez & Manassero Mas (2007) have corroborated the existence of a distancing between the "proposed objectives for the training process and the reality of the curriculum achieved by young people" (p. 428). For this reason, they recommend–at the end of their research– the development of processes that encourage the scientific vocation in today's societies, situation facing with international test results such as TIMSS and PISA.

According to this situation mentioned above, it is proposed a "scientific literacy", looking for attitudes through which it is possible to develop active forms of participation in the construction of scientific knowledge school (Vásquez Alonso y Manassero Mas, 2007, p. 429). Nevertheless, it is notorious a students' indisposition towards the monotony of the scientific training, assuring that there is a symmetry between the ways in which teachers

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teach science. It leads to an attitudinal decline towards science, which is generalized even more in university higher education. In addition, it gets complex based on the non-reflective understanding of the social nature of management sciences and organizational studies (Vásquez Alonso and Manassero Mas, 2008, p. 287).

It is for this reason that generating changes is a demand for teaching practices and attitudes, more in fields where teachers are not trained in pedagogy and didactics, so that changes in students' attitudes toward science are subsequently made.

These changes should not only go through the purely conceptual aspect, due to the decline of the school's scientific attitude. In general, the educational system should bring about conceptual, attitudinal and procedural changes in the teacher, who favors those same changes in the student, thanks to the fact that they interact constantly in spaces of knowledge construction; all this within the framework of science education (Mosquera Suárez and Furió- Más, 2008, p. 127).

It is well known that the exercise of teaching has a fundamental implication in the attitude of students towards the construction of scientific knowledge. That is why the way in which the teacher confronts scientific knowledge and seeks the student to approach it, taking into account that this is fundamental for the achievement of scientific and critical thinking from the same training process.

The didactic transposition consists, according to Zambrano Hernández (2012) and supporting on Chavelard (1991), in: "the work that transforms an object of knowledge to teach in a learning object"(p. 76)."

In this way, when the teacher seeks to transform the models of scholarly procedures into those of school models, he is carrying out an exercise in didactic transposition. This exercise requires a gradual but comprehensive analysis of the discipline, the object of the teaching, the situation, the virtue,

> the translation, and the didactic activity. It can be understood, how the process, the selection, the problems, the inclusion, and the facts inspired in the world; which allow the contextualization and the work with students, theoretically explaining some aspect of reality. It is a specific professional task that recognizes the epistemological differentiation of school knowledge (Bahamonde, 2006, p. 58).

Consequently, Bahamonde (2006) proposes the existence of a direct relationship between the cognitive model of school science, the scholar scientific models, the scientific scholar activity and the didactic transposition, within the framework of a scientific training for all. It is supported by Izquierdo, Adúriz-Bravo, & Aliberas (2004) in the following paragraph:

> The didactic transposition of scientific knowledge is conceived as a complex process of transformation of scholarly scientific models in theoretical models for teaching, which have as objective that students take ownership of the ways to think, talk, among others more specific. It is about helping students to build operative

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> mental schemas on certain aspects of reality, starting from their own intellectual resources and also developing a language that is appropriate to express it, so that they can see a way, similar to the scientists, the known facts, and other new for them (p. 295).

The didactic transposition becomes a fundamental element to the students' approach towards learned scientific models. Ballenilla (1997) cited by Zambrano Hernández (2012, p. 79), establishes three own senses of the teacher in the face of teaching:

> The theoretical disciplinary knowledge is determined through the knowledge of the scientific status and the sequence of teaching.
> The knowledge of the theory of education is contextualized by means of the knowledge called to be taught and the planning exercise in terms of the teaching.
> Practical knowledge, in which the content to be taught is located historically, scientifically, socially and culturally.

These elements are also consonant with the proposal of "integration of the domains of the nature of science and the pedagogical knowledge of content as a theoretical framework for science education", presented by Tamayo and Orrego (2005, p. 18).

These perspectives show that teachers' thinking continues to be a problematic and fundamental point in the face of scientific training at all levels. They establish the importance of competences and skills for teaching in conceptual, procedural and attitudinal aspects (Mosquera Suárez and Furió- More, 2008).

When considering the problems of teaching in the management sciences and the studies of organizations, it is understood that language constitutes a major difficulty, since it starts with the representations that students have of the social realities contained in the economic nature of historical events, and the institutionality of the company in today's world, without theoretically supporting these notions in philosophical, psychological, sociological and historical contents. That is to say, the student learns the management of economic, accounting, administrative, financial language, etc., thanks to the way in which the teacher faces it and intends to teach it, but the researched and theorized content proper from scholarly science are not approached to the classroom.

In this sense, it is not possible or it does not exist, thanks to the language proposed for the teaching of these disciplines, which are a true construction of scholarly scientific communities. This is why teachers' explanations are technical, not in terms of ignorance about theory, research and critical thinking, but also about not being able to explain them under parameters and proposals (García-Jiménez, 2016).

This text is no more than a critical approach from the teaching of science in favor of the consolidation of specific didactics in the disciplines of management and organizational studies, and the search to give greater importance to the approximation of students in their first level of university education. Here is where lies the wisdom from

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which new knowledge is built on a global level for each of the fields. With all this, we would expect a closer link between the realities of science and its discoveries with classroom experiences and scientific publications. This aspect not only improves students' critical and scientific stance, but also the circulation of knowledge, the margins and citation indexes, including the positioning of management research and organizations in Colombia and Latin America.

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