

Adapting and integrating alternative didactics in the teaching-learning-assessment system in relation to the concept of “disciplinary field”

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Abstract

In the current education system the importance and role of didactics (general didactics/ speciality didactics) and the didactic methodology of the teaching-learning-assessment process are well known. Therefore, beside several defining features that indicate the didactic dimension, in the sphere of education we note a number of issues that require a multidimensional approach to the learning contents. In other words, given the "scientification" of the contents, in the current education system they can no longer be taught / assimilated from the perspective of a single didactics. Therefore, the aim of this paper is to explain, on the one hand, the idea of alternative didactics and, on the other hand, its role in the teaching-learning-assessment system.

Keywords: *alternative didactics, teaching-learning-assessment system, educational pragmatism, learning contents, dynamic education*

1. Introduction

In today's society the fact that the knowledge process develops as a consequence of the disciplinary and methodological connections has become increasingly obvious. If at first the knowledge process developed in relation to the multidisciplinary paradigm (the dimension where knowledge was concentrated in one direction, in a disparate manner - Eși, 2014, 44), nowadays it only proves its legitimacy based on interdisciplinary, pluridisciplinary and transdisciplinary approaches. However, one shall see if such approaches are sufficient arguments for validating the process of “educational” knowledge.

Educational knowledge is that form of knowledge achieved in relation to the educational theories and methodologies. Although the concept of “knowledge” is pretentious in terms of what it expresses, in this context we shall use it as a notional and disciplinary reference point for assuming the idea of educational knowledge. In this context, we note that such “educational knowledge” acquires validity exactly by relating the contents it expresses to the inter-, pluri- and transdisciplinary approaches (where experiences are expressed through competencies (Niculescu, 2010, 181)).

Specific literature provides a number of sometimes contradictory explanations (Nicolescu, 1999, 53) regarding these approaches, which somehow underlie the system of scientific knowledge. Moreover, in our opinion, analysing the educational theory from the perspective of an epistemological basis cannot but support the need for the relationship between *epistemological didactics and intuitive didactics* in the context of dynamic education (Eşi, 2014, 31-36). However, a normal evolution of scientific knowledge can be explained in terms that are becoming increasingly relevant in the contemporary education.

Of course, by this assumption we must not understand that the dimension of traditional didactics must absolutely be abandoned. Alternatively, we are taking into account the idea of improving the educational system (which is, in our opinion, an open system). Or, in such circumstances, as it is well-known, explaining a new paradigm by using epistemological terms can be justified to the extent that the (conceptual/methodological) scientific analysis is also judicious. Examples of such concepts are the following: “disciplinary field” (in relation to the concept of “tesseract”), “intuitive didactics” (we particularly refer to the concept of “intuition”), “complementary didactics” (the approach that refers to the perspective of disunification of didactics).

2. Pragmatic illustrations of the concept of "disciplinary field" required for the process of understanding the idea of alternative didactics

As a relevant vector regarding the implementation of alternative didactics, dynamic education promotes and should promote scientific tolerance (the constructive, “positive” meaning of the word). In this sense, the activities initiated in regard to a theory on alternative didactics are translated into a multi-level dimension of scientific knowledge. Moreover, we cannot talk about a unique form of knowledge regarding alternative didactics, nor about more forms of knowledge (in the sense that a certain form of knowledge differs from another form, like, for instance, implicit knowledge is different from explicit knowledge); we should rather admit the existence of knowledge itself at *n-dimensional* level.

This assumption leads to the idea that alternative didactics must take into account the relationship between epistemological didactics and intuitive didactics and something more, namely something that adds extra knowledge through the quantitative/qualitative transition from a certain state to another. Perhaps in order to have a better understanding of such an idea, the best illustration would be provided by the concept of “disciplinary field”, (explained in relation to the concept of “tesseract”). Therefore, going somewhat beyond the multi-, pluri- and transdisciplinary perspectives and taking into consideration the idea of *n-dimension*, we could make a first step in justifying the education system of alternative didactics.

An argument that supports this idea is that the current didactics cannot entirely satisfy the level of understanding and applicability of the scientific contents. Thus, there are contents that need to be related to other concepts/specific terminologies/totally different specializations in order to be explained and understood. Interdisciplinary approaches are the most convincing example in this respect (where the conceptual and methodological transfer is accomplished).

Therefore, the starting point for justifying our approach is the concept of “disciplinary field”, which refers to the area where the disciplines overlap based on the correlation between methodologies, concepts and applications. In our opinion, the disciplinary field is the result of inter-, pluri- and transdisciplinary approaches and their applicability at different levels of correlation. An approximate illustration of this concept can be seen in **Figure 1**.

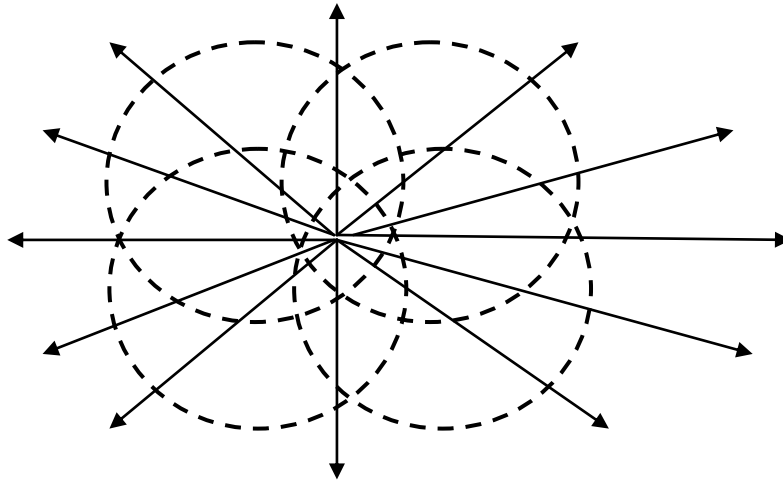


Figure 1 – Illustration of the concept of “disciplinary field”
Source: author’s own elaboration

In Figure 1, the arrows represent the directions corresponding to the n disciplinary dimensions. The common parts (that form the disciplinary field) are formed by the intersections of all the disciplinary fields, and also by the junction between the fields, no matter how far away from each other they are in the spatial illustration. The common and defining element that could allow the development of a disciplinary field is represented by the inter-, pluri- and transdisciplinary approaches/explanations themselves.

However, please note that in such an illustration of the disciplinary dimensions we can identify several disciplinary fields. The field with the strongest “magnetism” is the one that manages to generate the most powerful form of knowledge. In other words, we note the existence of the law of duality (also found in the logic of the terms/concepts); according to it, the more powerful is the intension, the less powerful becomes the extension. Therefore, the more numerous and powerful are the characteristics of a disciplinary field, the more intersections and unifications are there between the disciplinary dimensions. Of course, there may be disciplinary fields formed from fewer such unifications and intersections, with powerful intension. This is an issue that we shall analyse within a future rigorous research paper.

Therefore, our perspective regarding the understanding of these dimensions should go beyond the two-dimensional and three-dimensional frames (Figure 2). We could take as a starting point the four dimensional universe, which could be illustrated by relieving the concept of “tesseract” (“four dimensional hypercube” - <http://commons.wikimedia.org/wiki/File:Hypercubecubes.svg>), as well as its coordinates (Ramirez; Pérez -Aguila, 2002, 1-8).

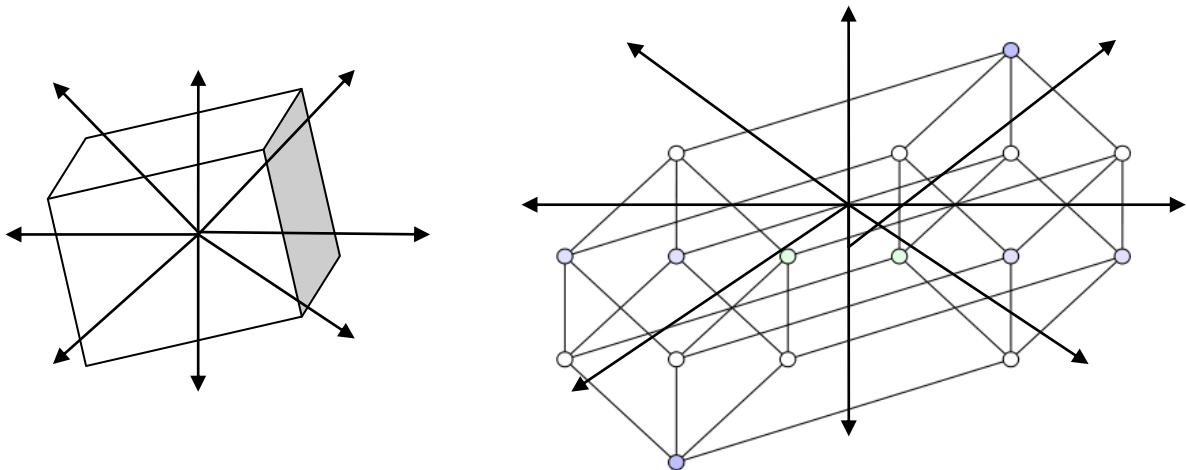


Figure 2 – Illustration of the concept of “disciplinary field” in relation to the concept of “tesseract”

Source: adapted after
<http://commons.wikimedia.org/wiki/File:Hypercubecubes.svg>
[accessed 22.01.2015]

The idea can be put into practice in a range of disciplinary dimensions (Pérez -Aguila, 2006, 1-13) or scientific applications (Sarma; Maccherone; Wagstrom; Herbsleb, 2009). Thus, in the educational process, an important role belongs to the forms of illustrating the disciplinary dimensions in relation to the idea of “disciplinary field”.

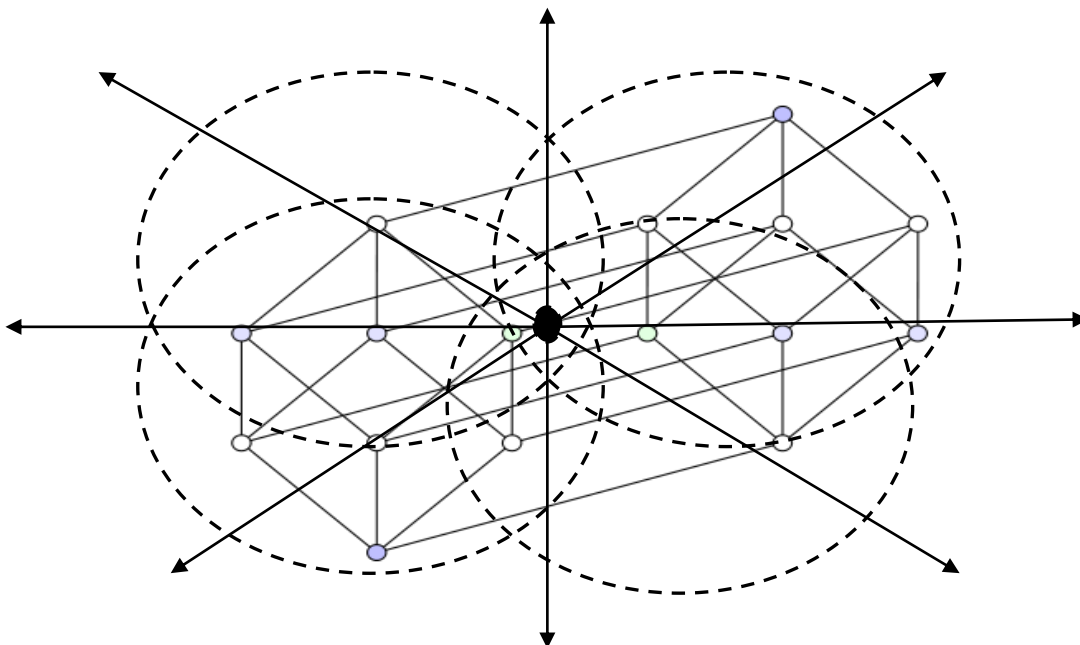


Figure 3 – Form of integrating and adapting the concept of “disciplinary field” to the educational dimension in relation to the idea of alternative didactics

Source: author’s own elaboration

2. The pragmatic dimension of alternative didactics

The process of disunification of the disciplinary fields requires a purely scientific and intuitive approach. In other words, we believe that epistemological didactics and intuitive didactics can contribute to the implementation of alternative didactics. In this context, the educational reality is made on the one hand of epistemological-intuitive structures through which different meanings and significances are pragmatically correlated and on the other hand of teaching-learning-assessment contents. Therefore, in our opinion, such a didactic situation requires a rational application of the scientific contents, which can be correlated with methodological strategies of assuming the future explanations that are specific to alternative didactics.

These explanations become judicious given that the interpersonal interaction expresses specific communicational behaviours in terms of the didactic activity. Thus, assessing and reassessing the didactic concepts requires assuming new educational activities. Of course, the conceptual layering of the didactic process does not fully solve the methodological problem. Therefore, the application of the educational valences that are specific to the dimension of alternative didactics reflects the need for an open systemic approach that enables the understanding and application of the new contents.

The need for alternative didactics in the contemporary education system is justified to the extent that the necessity of social utility synchronically translates the very idea of education. In other words, the correlation between society, education and didactics/pedagogy reveals the pragmatic nature of today's form of implementing the educational strategy. Thus, the criteria for valorising the optimization sequences regarding the learning-teaching-assessment process are subordinated to the moral/social dimension, which is specific to dynamic education.

Thus, the value system represents a specific level of organization through which the strategies acquire educational legitimacy. In this context, the role of alternative didactics becomes relevant and such an educational/didactic reality should be understood to the extent that the process of didactic materialization of the objectives assumed by the educational decision makers (teachers / trainers) is completed. Moreover, a proper understanding of the role and place of the methodological/conceptual/theoretical connections within the disciplinary field supports the implementation/development of alternative didactics. Assuming such a strategy enables the didactic process, while allowing the scientific contents to be approached from the perspective of a new methodology of the new didactics from the educational system.

3. Conclusions and suggestions

Regarding the disunification of the fields, we should guard against the principle according to which any form of connection is possible in any "possible world". We suggest seeing if a specific connection (from the category "anything can be possible") can prove its validity as a disciplinary field of the educational sciences. Moreover, our concerns as didacticians should be focused mainly on the pragmatic nature of such a disciplinary field.

The axiological conditionings resulting from the process of implementing alternative didactics call for the methodological reassessment of the scientific contents. This is, in fact, a whole process of reassessing the programs that underlie the presentation/assimilation of the scientific contents.

Therefore, the utility of alternative didactics is fully justified given that the teaching-learning-assessment process is assumed by all educational/social actors.

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