Competence, didactic situations and Virtual Environments for Teaching and Learning

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ABSTRACT

In the last decade, there has been a notable increase in the use of Information and Communication Technologies (ICTs) in the development of teaching tools and, consequently, their integration in different disciplinary areas of different educational levels. University has not escaped to this reality, and although most modern technological means are far from being available in every classroom - at least in our country- it is increasingly common to have them.

Within the arsenal of available technologies, the Virtual Environments for Teaching and Learning (VLEs), or Learning Management Systems (LMS), have enjoyed rapid development and integration in the context above, although often there is no consensus what is "better" because in its assessment are weighted various factors, both institutional and economic.

We hold that, beyond those mentioned above, the didactical issue should also be considered, particularly in relation to VLEs offer the opportunity to deepen not only in content but mostly in more general procedures of activities in each discipline, favoring the emergence of different models of learning, competence based.
In light of these considerations, this study is part of the problem mentioned, with respect to the LMS and VLEs particularly in the teaching of mathematics at university level, taking as a theoretical framework for the latter the "theory of didactic situations" of Guy Brousseau. The paper tries to examine what possibilities are offered by e-learning environments, to enact the referred theory. This requires taking into account how are affected issues such as:

a) the organization and planning of the educational process,
b) the structure of knowledge itself (to suit the new context of building knowledge-transfer);
c) the relationships between the relevant actors (institution, teacher, student) and the medium in which they develop activities;

d) personal factors (individual characteristics, values, motivations, behaviors, satisfaction level, etc.)., institutional and social (impact, supply and demand for training, sustainability, etc.);
e) the design and development activities, and assessment instruments and processes;
f) programming, renewal and format of educational materials and resources.

Keywords

Platforms, didactic, mathematics, learning, competence

Observations

The work forms part of the master's thesis TEACHING EDUCATIONAL TOOL TECHNOLOGIES WEB BASED DESIGN UNDER A DIDACTIC PERSPECTIVE and the research project THE REALIZATION OF COMPETENCY-BASED APPROACH, APPLICATIONS IN THE MICROCURRICULUM LEVEL.