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## **Significant Approach of Mathematical Didactics in University Environments, a Perspective of Change in Formation of Trainers of the National Experimental University "Romulo Gallegos" Area Education Sciences**

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### **ABSTRACT**

In the field of educational training in university environments, the training of trainers cannot be effective and efficient as long as the didactic processes of mathematics are developed in a traditional way, not allowing an encounter with reality between the protagonists of the teaching process, influencing in the new teacher a repetitive mathematical didactics, totally divorced from the teaching objectives in the training process of trainers. In this sense, the purpose of the present investigation was to develop a resignifying theory of mathematical teaching, university andragogical praxis embedded in complex thinking. The study was based on theories of referential support such as: complexity theory, constructivism theory, androgynous or synergy theory, cybernetics theory, humanist theory, motivation theory, meaningful learning theory and therefore the theory of structuralism - rationalism. Given the characteristics of it, the research was carried out under the qualitative approach, using the phenomenological method. By its nature, the study was developed epistemologically, in complex thinking; information was collected through the application of the in-depth interview. The key informants were six; two teachers specialized in mathematics and one in computing, and three education students. For the analysis of the information, the categorization, structuring, triangulation and theorization of the information was used, allowing the researcher to compare and contrast the information provided by the informants. The following findings were obtained from the processes carried out; in the teaching-learning process the contributions of the teacher are as important as that of the participants in order to guarantee the effectiveness and effectiveness of the training process. In this regard, the position of the researcher is oriented towards the need to sponsor the dialogic and socializing participation of the participants in the teacher training scenarios with the protagonists of the learning environments in which the new trainers will develop.

**Descriptors:** Resignificant Theoretical Approach, Mathematics Didactics, University Andragogical Praxis, Complexity.

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