Próximo Seminario DMAT

Jueves 19 de Abril de 2018, 11:30 - 12:30

Sala de Seminarios, Departamento de Matemática

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Development and Evaluation of an Internet-Based Tutorial Module (i-TModule) For Statistics Learning Among Postgraduate Students.

Resumen: Students' ability to use statistics, which is mathematical in nature, is one of the concerns among instructors. Since, online learning platform and Learning Management Systems (LMSs) are used in teaching and learning process, especially in universities, embedding the pedagogical characteristics of learning within an e-learning system would be "value added". It could facilitate the traditional method of learning mathematics, which is usually a teacher-centered method. However, there is a lack of innovation to adopt effective instructional approaches on those learning platforms.

In this talk, I am going to illustrate the development phase and evaluation of an Internet-based tutorial module (i- TModule) which is designed based on a known constructivism learning approach. This module has utilized an LMS to develop the tutoring environment with adding: a) the use of the Internet-based resources in varying formats (video, text, animation, charts, etc), b) offering the learning activities and interaction during .ºdd hoursç) Subsequent instructional contents and activities based on Cognitive Apprenticeship Model, CAM, according to individual needs, and d) monitoring and assessing of individual problem-solving skills, online behavior, and reaction during the delivery of the designed instruction.

Many researchers emphasize the effectiveness of cognitive apprenticeship in learning and problem-solving in the workplace and face-to-face learning. However, we considered to add this model in a virtual place within a community of novices and experts through observation, modeling and then practice plus coaching.

In addition, the implementation and results of the evaluation will be parented. As a short, you will see, how in comparison with the traditional learning model, online CAM could significantly promote students' problem-solving performance. The findings are confirmed the considerable value of i-TModule in the improvement of statistics learning for non-specialized postgraduate students.