A Soft Computing Approach to Quality Evaluation of General Chemistry Learning in Higher Education

Margarida Figueiredo, José Neves and Henrique Vicente

Abstract In contemporary societies higher education must shape individuals able to solve problems in a workable and simpler manner and, therefore, a multidisciplinary view of the problems, with insights in disciplines like psychology, mathematics or computer science becomes mandatory. Undeniably, the great challenge for teachers is to provide a comprehensive training in General Chemistry with high standards of quality, and aiming not only at the promotion of the student’s academic success, but also at the understanding of the competences/skills required to their future doings. Thus, this work will be focused on the development of an intelligent system to assess the Quality-of-General-Chemistry-Learning, based on factors related with subject, teachers and students.

Keywords General Chemistry · Higher Education · Logic Programming · Knowledge representation and reasoning · Artificial Neural Networks