# A Case Based Reasoning View of School Dropout Screening



**José Neves, Margarida Figueiredo, Lídia Vicente and Henrique Vicente**

**Abstract** The cause for student dropout is often termed as the antecedent of failure, since it stands for a key event, which leads to dropout. Indeed, school dropout is well thought out as one of the major worries of our times. It is a multi-layered and complex phenomenon, with many triggers, namely academic striving and failure, poor attendance, retention, disengagement from school or even socio-economic motives. School dropout represents economic and social losses to the individual, family and community. However, it may be prevented if the educational actors hold pro-active strategies (e.g., taking into account similar past experiences). Indeed, this work will start with the development of a decision support system to assess school dropout, centered on a formal framework based on Logic Programming for Knowledge Representation, complemented with a Case-Based Reasoning approach to problem solving, which caters for the handling of incomplete, unknown, or even contradictory information, i.e., it improves the analysis enactment of the retrieving cases process.

**Keywords** School dropout · Case Based Reasoning · Logic programming · Knowledge representation · Similarity analysis

J. Neves(✉)
Centro Algoritmi, Universidade do Minho, Braga, Portugal
e-mail: jneves@di.uminho.pt

M. Figueiredo
Departamento de Química, Centro de Investigação em Educação e Psicologia,
Escola de Ciências e Tecnologia, Universidade de Évora, Évora, Portugal
e-mail: mtf@uevora.pt

L. Vicente
Agrupamento de Escolas de Reguengos de Monsaraz, Reguengos de Monsaraz, Portugal
e-mail: lmrcvicente@gmail.com

H. Vicente
Departamento de Química, Centro de Química de Évora,
Escola de Ciências e Tecnologia, Universidade de Évora, Évora, Portugal
e-mail: hvicente@uevora.pt



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