

A Case Based Reasoning View of School Dropout Screening

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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

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