

Personalized Educational Paths through Self-Modifying Learning Objects

George Pashev, George Totkov, Hristina Kostadinova, Hristo Indzhov

Abstract:

The paper presents a formal model for generation of personalized learning paths. The paths consist of self-modifying learning activities suitable for the achievement of course goals. The course goals (as defined by the teacher) are a list of functions/predicates with specific slots and include obligatory activities required for the automatized construction of learning paths. Further, the problems related to automatized learning path construction are identified and solved with the use of an original approach. The approach includes (but is not limited to): introduction of different points of view (aspects) for learning objects; automatized gathering/accumulation of metadata for learning activities; generation of personalized learning paths using set of student achievements, etc.

Key words: adaptive e-learning, generation of e-learning paths, self-modifying learning objects, automatized metadata gathering, revised Bloom taxonomy.

View article [here](#) .