

River Publishers Series in Innovation and Change in Education - Cross-cultural Perspective

Computer-Driven Instructional Design with INTUITEL

An Intelligent Tutoring Interface for Technology-Enhanced Learning

Editors:
Kevin Fuchs, University of Applied Sciences Karlsruhe, Germany
Peter A. Henning, University of Applied Sciences Karlsruhe, Germany
ISBN: 9788793519510
e-ISBN: 9788793519503
Available From: April 2017
Price: € 70.00

Description:

INTUITEL is a research project that was co-financed by the European Commission with the aim to advance state-of-the-art e-learning systems via addition of guidance and feedback for learners. Through a combination of pedagogical knowledge, measured learning progress and a broad range of environmental and background data, INTUITEL systems will provide guidance towards an optimal learning pathway. This allows INTUITEL-enabled learning management systems to offer learners automated, personalised learning support so far only provided by human tutors

INTUITEL is - in the first place - a design pattern for the creation of adaptive e-learning systems. It focuses on the reusability of existing learning material and especially the annotation with semantic meta data. INTUITEL introduces a novel approach that describes learning material as well as didactic and pedagogical meta knowledge by the use of ontologies. Learning recommendations are inferred from these ontologies during runtime. This way INTUITEL solves a common problem in the field of adaptive systems: it is not restricted to a certain field. Any content from any domain can be annotated. The INTUITEL research team also developed a prototype system. Both the theoretical foundations and how to implement your own INTUITEL system are discussed in this book.

Keywords: Adaptive systems, intelligent tutoring systems, e-learning, blended learning, mobile learning, ontologies, computers in education, pedagogic, semantic technologies