
**Computer-Driven Instructional
Design with INTUITEL
An Intelligent Tutoring Interface
for Technology-Enhanced Learning**

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Preface

INTUITEL is a research project that was co-financed by the European Commission. It was conducted from 2012 to 2015 under the participation of 12 European partners: Karlsruhe University of Applied Sciences, Steinbeis-Europa-Zentrum, University of Reading, University of Vienna, International University of La Rioja, Holon Institute of Technology, Fraunhofer IOSB, TIE Kinetix, FZI Research Center for Information Technology, Universidad de Valladolid, Lattanzio Learning and IMC AG.

INTUITEL aims 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 provides guidance towards an optimal learning pathway.

INTUITEL blends in with several free and commercial Learning Management Systems. The number of supported platforms is extendable via a clearly defined interface description that can be implemented by any Learning Management System.

This book is both a summary of the findings of the INTUITEL project and a guidance for developers who want to implement their own INTUITEL-enabled system.

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List of Abbreviations

CC	Concept Container
CCM	Cognitive Content Model
CL	Communication Layer
CM	Cognitive Model
DF	Didactic Factor
DM	Domain Model
GUI	Graphical User Interface
KD	Knowledge Domain
KO	Knowledge Object
KT	Knowledge Type
LMS	Learning Management System
LO	Learning Object
LORE	Learning Object Recommender
LP	Learning Pathway
LPM	Learner Progress Model
LPM	Learning Progress Model
MCS	Multidimensional Cognitive Space
mId	message identifier
MLP	Macro Learning Pathway
mLP	micro Learning Pathway
MT	Media Type
OWL	Web Ontology Language
PO	Pedagogical Ontology
QB	Query Builder
REST	Representational State Transfer
RR	Recommendation Rewriter
SCORM	Sharable Content Object Reference Model
SLOM	Semantic Learning Object Model
SMW	Semantic MediaWiki
TUG	Tutorial Guidance
USE	User Score Extraction
UUID	Universal Unique Identifier

