Contents

Lis	List of Contributors	
1	E-Learning Networked Environments: Concepts and Issues Samuel Pierre and Gilbert Paquette	1
Par	t I Building Knowledge Scenarios	
2	Bridging the Gap Between E-Learning Modeling and Delivery Through the Transformation of Learnflows into Workflows Olga Mariño, Rubby Casallas, Jorge Villalobos, Dario Correal, and Julien Contamines	27
3	A Toolkit for Building Geo-Referenced Lessons: Design, Implementation, and Praxis Sylvain Giroux	60
Par	t II Building Knowledge Environments	
4	TELOS: A Service-Oriented Framework to Support Learning and Knowledge Management Gilbert Paquette, Ioan Rosca, Stefan Mihaila, Anis Masmoudi	79
5	Cognitive Modeling of Personalized Software Design Styles: A Case Study in E-Learning Mauro Marinilli	110
6	Skills SuperStore: Online Interactive Study Skills Environment Caitriona Bermingham and Abdulhussain Mahdi	147

Index

,	Marie-Hélène Abel, Ahcene Benayache, Dominique Lenne, and Claude Moulin	190
Par	t III Building Knowledge Networks	
8	Designing and Testing an Open-Source Learning Management System for Small-Scale Users	209
	Kevin Johnson and Timothy Hall	
9	Reinforcement Agents for E-Learning Applications Hamid R. Tizhoosh, Maryam Shokri, and Mohamed Kamel	251
10	Secure Communication Layer for Scalable Networks of Learning Object Repositories Marek Hatala, Griff Richards, Timmy Eap, and Ashok Shah	276
	Marek Haidid, Orijj Richards, Timmy Eup, and Asnok Shan	
11	Quality of Service and Collaboration Aspects in a Distributed E-Laboratory Environment Alejandro Quintero, Samuel Pierre, and David Tassy	306
Par	rt IV Retrieving Resources and Knowledge	
12	Quality Rating and Recommendation of Learning Objects Vivekanandan Kumar, John Nesbit, Philip Winne, Allyson Hadwin, Dianne Jamieson-Noel, and Kate Han	337
13	Data Mining in E-Learning Khaled Hammouda and Mohamed Kamel	374
14	LORNAV: Virtual Reality Tool for Navigation of Distributed Learning Objects Repositories Abdulmotaleb El Saddik and M. Anwar Hossain	405

431