

Table of Contents

Full Papers

Supporting Adaptive Learning with a Student Model Repository and Shared Adaptive Variables	1
<i>Bakhtiyor Bahritidinov, Jorge Suárez de Lis, Eduardo Sánchez, and Manuel Lama</i>	
Enhancing Personal Learning Environments by Context-Aware Tagging	11
<i>Yiwei Cao, Dejan Kovachev, Ralf Klamma, and Rynson W.H. Lau</i>	
Assisting the Authoring Process of IMS-LD Using Web Parsing Technique	21
<i>Ka-shing Chan and Lam-for Kwok</i>	
Dynamic Navigation for Personalized Learning Activities Based on Gradual Adaption Recommendation Model	31
<i>Jian Chen, Haifeng Man, Neil Y. Yen, Qun Jin, and Timothy K. Shih</i>	
An Advanced Learning Environment Aided by Recognition of Multi-modal Social Signals	41
<i>Jingying Chen, Dan Chen, Lizhe Wang, and Oliver Lemon</i>	
An Ontology-Based Framework for Personalized Adaptive Learning	52
<i>Ronnie Cheung, Calvin Wan, and Calvin Cheng</i>	
Personalized Curriculum Recommender System Based on Hybrid Filtering	62
<i>Jungwon Cho and Eui-young Kang</i>	
Evaluation of Learning Outcomes	72
<i>Sylvia Encheva</i>	
Incorporating an Automatic Judge into Blended Learning Programming Activities	81
<i>Katerina Georgouli and Pedro Guerreiro</i>	
Visualizing Activities for Self-reflection and Awareness	91
<i>Sten Govaerts, Katrien Verbert, Joris Klerkx, and Erik Duval</i>	
Web-Based Enhanced Learning Style Index with Integration into an e-Learning System	101
<i>Mohamed Hamada and Kosuke Nishikawa</i>	

Gap Detection in Web-Based Adaptive Educational Systems	111
<i>Dominik Jednoralski, Erica Melis, Sergey Sosnovsky, and Carsten Ullrich</i>	
Bridging the Knowledge Gap between Research and Education through Textbooks	121
<i>Steven B. Kraines, Takaki Makino, Weisen Guo, Haruo Mizutani, and Toshihisa Takagi</i>	
Predicting Learning Styles in a Conversational Intelligent Tutoring System	131
<i>Annabel Latham, Keeley Crockett, David McLean, and Bruce Edmonds</i>	
Specifying a Programming Exercises Evaluation Service on the e-Framework	141
<i>José Paulo Leal, Ricardo Queirós, and Duarte Ferreira</i>	
A Supplement for Learning Herbal Medicine Using a Web-Based Tool and Social Network	151
<i>Verayuth Lertnattee, Sinthop Chomya, and Virach Sornlertlamvanich</i>	
Using Social Software for Teamwork and Collaborative Project Management in Higher Education	161
<i>Na Li, Carsten Ullrich, Sandy El Helou, and Denis Gillet</i>	
Construction of the Intelligent Tutoring System from the View of Distributed Cognition	171
<i>Xin Li, Rong Liu, and Minghua Li</i>	
A Scaffolding Support System for English Essay Reading	180
<i>Jia-Jiunn Lo, Shiou-Wen Yeh, and Chao-Shien Sung</i>	
Learning Content Adaptation for m-Learning Systems: A Multimodality Approach	190
<i>Ivan Madjarov and Omar Boucelma</i>	
Supporting Active Learning in CLIL through Collaborative Search	200
<i>Ivana Marenzi, Rita Kupetz, Wolfgang Nejd, and Sergej Zerr</i>	
Supporting Flexible Competency Frameworks	210
<i>Erica Melis, Arndt Faulhaber, Ahmad Salim Doost, and Carsten Ullrich</i>	
Extending Learning Objects by Means of Social Networking	220
<i>Julià Minguillón, M. Elena Rodríguez, and Jordi Conesa</i>	
Improving Hybrid Learning of Physical Education by Video Review	230
<i>Yajun Pang</i>	

An Emotion Regulation Model in an E-Learning Environment	240
<i>Jiwei Qin, Qinghua Zheng, Haifei Li, and Huisan Zhang</i>	
Delivering QTI Self-tests to Personal Learning Environments Using Wookie Widgets	250
<i>Vladimir Tomberg, Raido Kuli, Mart Laanpere, and Peeter Normak</i>	
e-Training DS: An Authoring Tool for Integrating Portable Computer Science Games in e-Learning	259
<i>Roberto Tórnero, Javier Torrente, Pablo Moreno-Ger, and Baltasar Fernández Manjón</i>	
Not Yet Ready for Everyone: An Experience Report about a Personal Learning Environment for Language Learning	269
<i>Carsten Ullrich, Ruimin Shen, and Denis Gillet</i>	
eCH, A Course Help Tool for Teacher	279
<i>Kai-li Wang and Philippe Trigano</i>	
Collaborative Learning by Means of Multiplayer Serious Games	289
<i>Viktor Wendel, Felix Hertin, Stefan Göbel, and Ralf Steinmetz</i>	
CONSPECT: Monitoring Conceptual Development	299
<i>Fridolin Wild, Debra Haley, and Katja Bülow</i>	
LABTA: An Agent-Based Intelligent Teaching Assistant for Experiment Courses	309
<i>Chao Yang</i>	
An Open Model for Learning Path Construction	318
<i>Fan Yang, Frederick W.B. Li, and Rynson W.H. Lau</i>	
Automatically Constructing a Compact Concept Map of Dance Motion with Motion Captured Data	329
<i>Yang Yang, Howard Leung, Lihua Yue, and Liqun Deng</i>	
Using the Petri Nets for the Learner Assessment in Serious Games	339
<i>Amel Yessad, Pradeepa Thomas, Bruno Capdevila, and Jean-Marc Labat</i>	
Web-Based Probabilistic Retrieval of Chinese Calligraphic Character Images: An Efficiency Study	349
<i>Yi Zhuang</i>	

Short Papers

An Effort to Boost Building an Attentive Service Environment for the Participants in Smart Classrooms	361
<i>Hongliang Gu and Ruimin Shen</i>	

A Study on the Effectiveness of Cooperative Learning in College English Writing 368
 Li-zhen Huang and Fang Tang

Comparing Learning Results of Web Based and Traditional Learning Students 375
 Julija Lapuh Bele and Joze Rugelj

A Personalized Assessment System Based on Item Response Theory 381
 Youngseok Lee, Jungwon Cho, Sungjae Han, and Byung-Uk Choi

Open Learning: A Framework for Sharable Learning Activities 387
 Haifeng Man, Hong Chen, and Qun Jin

Studies on Sustainable Design Strategies of the Product-Service System for the Web-Based English Learning 393
 Yue Qiu

Design and Implementation of Collaboration Support in Virtual Experiment Environment 399
 Yu Sheng, Jianxin Wang, Weiping Wang, and Lanying Liu

Cross-Cultural Multimedia Language Learning: Case Study and Analysis 404
 Carsten Ullrich, Kerstin Borau, Scott Grant, Daniel Jackson, and Ruimin Shen

Author Index 411