The design of effective simulation-based inquiry learning environments p. 3
E-learning evolution: from M-learning to educational semantic Web and beyond p. 7
Designed collaboration as a scaffold for schematic knowledge integration p. 15
Technology affordances for intersubjective meaning-making p. 21
Design of an environment for developing presentation skills p. 29
Ontological modeling approach to blending theories for instructional and learning design p. 37
A case of blending learning in computer teaching - the model and the application p. 45
A combined method for extracting rules with improved quality p. 49
The impact of CABLE on teaching computer programming p. 55
Problem solving process oriented diagnosis in logic programming p. 63
Programming teaching support system using student model p. 71
A method for creating teaching materials of practical object-oriented methods education p. 75
Science net: effects of an e-learning system on elementary school students' self-regulated learning in science classes p. 81
Using satellite resources for scientific inquiry p. 89
Experimental researches on development of pupils' advanced cognitions in PRIME environments p. 97
Teaching Chinese handwriting by automatic feedback and analysis for incorrect stroke sequence and stroke production errors p. 107
Developing a practical domain knowledge base and problem solving system for intelligent educational system of high school chemistry p. 115
The COLAC model: collaborative paper-writing in the humanities p. 119
Experimental investigation and implementation of support for problem generation by presenting cases p. 123
A computer-based environment for learning by problem-posing as sentence-integration p. 127
The impact of structured discussion on students' attitudes and dispositions toward argumentation p. 133
Assessing the impact of a structured argumentation board on the quality of students' argumentative writing skills p. 141
Incorporating online discussion in classroom learning: a new strategy p. 149
Using agents for enhancing learning effects in an advanced discussion forum p. 157
Research on personality mining system in e-learning by using improved association rules p. 167
Analysis on relationships of emotional transmissions between participants and their emotional aspects in communication using bulletin board system p. 171
Learning nonverbal emotion interaction in 3D intelligent virtual environment for children p. 175
Development of know-how information sharing system in care planning processes p. 179
Student learning and team formation in a structured CSCL environment p. 185
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>An integrated framework for fine-grained analysis and design of group learning activities</td>
<td>193</td>
</tr>
<tr>
<td>The development of a grouping system in a collaborative learning environment</td>
<td>201</td>
</tr>
<tr>
<td>Students' understandings and attitudes toward group learning: an empirical study</td>
<td>205</td>
</tr>
<tr>
<td>The effectiveness of knowledge building through computer supported collaborative learning among elementary students: a case study</td>
<td>209</td>
</tr>
<tr>
<td>Computer-supported content analysis for collaborative knowledge building in CSCL</td>
<td>217</td>
</tr>
<tr>
<td>A novel Web-based collaborative learning supporting system with navigation function</td>
<td>225</td>
</tr>
<tr>
<td>Towards auto-coding of collaborative interaction texts based on maximum entropy approach</td>
<td>229</td>
</tr>
<tr>
<td>Web based collaborative environment for engineering graphics education</td>
<td>233</td>
</tr>
<tr>
<td>Time-based self-learning support using collaborative learning process</td>
<td>237</td>
</tr>
<tr>
<td>The design of a collaborative learning environment in a mobile technology supported classroom: concept of fraction equivalence</td>
<td>241</td>
</tr>
<tr>
<td>Scientific modeling of technology-mediated collaborative learning processes</td>
<td>249</td>
</tr>
<tr>
<td>Exploring the learning effect of a Web-based learning community on EMBA students</td>
<td>257</td>
</tr>
<tr>
<td>Development of a discussion board system designed for the group discussion that includes peer-review process</td>
<td>261</td>
</tr>
<tr>
<td>Improving creativity for mathematical problem solving using Web-based multimedia whiteboard system</td>
<td>267</td>
</tr>
<tr>
<td>Developing a VR-based projectile system using haptic device for learning physics</td>
<td>275</td>
</tr>
<tr>
<td>Proposal for digital partners project</td>
<td>283</td>
</tr>
<tr>
<td>Development of portfolio assessment support system</td>
<td>289</td>
</tr>
<tr>
<td>Peer-assessment in Web-based ePortfolios system: an experimental study</td>
<td>297</td>
</tr>
<tr>
<td>Construction and performance evaluation of high quality curriculum integrated with information technology</td>
<td>305</td>
</tr>
<tr>
<td>Effectiveness of WebQuest in the teaching of STS in secondary biology</td>
<td>309</td>
</tr>
<tr>
<td>Effects of using digital contents designed for PDA as a teaching aid in an observational learning of planktons for fieldworks on a ship</td>
<td>315</td>
</tr>
<tr>
<td>A study of message reading efficiency of color screen mobile phones</td>
<td>323</td>
</tr>
<tr>
<td>The design of a Web-based learning platform: a case study in Taiwan</td>
<td>327</td>
</tr>
<tr>
<td>A study of implementing Web-based learning systems to enhance learning for the supply chain management (SCM) course in higher education</td>
<td>331</td>
</tr>
<tr>
<td>What is expected of a facilitator in a virtual learning environment?</td>
<td>335</td>
</tr>
<tr>
<td>Proactivity, autonomy &amp; social networking: transitional environments for the Japanese educational context</td>
<td>341</td>
</tr>
<tr>
<td>Effects of peers interactivity and self-regulated learning strategies on learning art appreciation through weblog</td>
<td>349</td>
</tr>
<tr>
<td>An application of social network analysis in evaluation of CSCL</td>
<td>353</td>
</tr>
</tbody>
</table>
Understanding asynchronous teaching and learning dialogues - an integrative approach p. 357
Participatory agent-based gaining methodology in cross-cultural education: exploring efficient and sustainable civil society and community p. 363
Internet for senior citizens in China: survey and proposal p. 371
Why do students engage in e-learning: a Chinese perspective p. 379
Enabling a multilateral distance class between China, Korea and Japan: effective utilization of networking technologies p. 383
Digital video database: supporting student teachers' learning about teaching during teaching practice p. 389
Building and evaluation of a semantic Web system that provides teachers with lesson plans p. 397
An improved learning content management system framework p. 405
Resource based solution to teachers' knowledge management p. 409
Collaborative building of Japanese Kanji pronunciation database for learning Japanese by Chinese p. 413
Using IT to power and support problem-based engaged learning p. 417
A study of innovative uses of ICT in primary education p. 423
Impacts of grade 7-9 students' computer usage after school on academic achievement: a school case study p. 431
Using interactive whiteboards (IWB) to enhance learning and teaching in Hong Kong schools p. 439
Conditions facilitating the implementation of information communication technology integration in Malaysian smart school p. 443
A study of the present status of IT teachers training in Microsoft's 'partners in learning' project - a content analysis approach p. 447
\(i^{superscript n}PD\): an emerging theoretical framework for educational professional development in the information age p. 451
Automated mentoring for reflection in an Eportfolio p. 457
Guided map for scaffolding navigation planning as meta-cognitive activity in hyperspace p. 465
Self-directed learning in technology supported project work p. 473
Multi-step annotation to promote reflective learning with a mobile phone p. 477
Property exchange method for automatic generation of computer-based learning games p. 483
Development and validation of an animation-based test in the area of earth sciences p. 491
Weaving pedagogy into gaming: learning design principles for developers p. 495
VR edutainment material interlude for dynamics experiment and the development platform prelude p. 499
Using the "record-replay" function for elaboration of knowledge in educational games p. 503
Investigating learner autonomy toward e-learning p. 509
Moderating role of online self-efficacy in relation between learning strategy and online performance p. 517
Understanding e-learners' characteristics and performance in online courses p. 521
An exploratory study on teachers' perceptions of game-based situated learning  p. 525
Visualizing errors for self-correcting discrepancy between thinking and writing  p. 535
Using systematic animation to teach dynamic science concepts  p. 543
Creating animations in SVG format for visualizing program execution  p. 551
Effects of the voice recognition on the writing of students with learning disabilities  p. 555
Designing a teacher professional knowledge base and its operation model based on school-based curriculum development  p. 561
Dynamic composition of curriculum for personalized e-learning  p. 569
Development of a photo management system in schools which ensures students appear equally  p. 577
Probing technology as affordances for negotiating meaning in the elementary science classroom - a participation perspective  p. 587
Analysis of meaning making in online learning  p. 595
Facilitating knowledge construction by providing individualized services  p. 603
The role of on-line facilitators: types of collaborative skills for effective e-learning activities  p. 611
Fostering project-based, active learning through use of technology  p. 621
Framework for problem-solving based learning in nursing domain - a practical study  p. 625
A polytomous computerized-adaptive testing that rewards partial knowledge  p. 629
Research on algorithm of computer adaptive test using optimized MDPLTM  p. 637
Cognitive maps-based student model  p. 643
Improving quality of online forum interactions in distance higher education  p. 645
Applying weighted learning object to build adaptive course in e-learning  p. 647
Annotation in information research for decision making  p. 649
Effects of the use of graphic calculators on cognitive and metacognitive domains in teaching and learning of mathematics  p. 651
Improve effectiveness of dialogue in learning communities  p. 653
Validation of the mathematics courseware usefulness evaluation instrument  p. 655
Expert tutoring and natural language feedback in intelligent tutoring systems  p. 657
Learning environment for designing physics experiment: deep  p. 659
Standards, adaptation & pedagogy: quality assessment in e-learning  p. 661

Table of Contents provided by Blackwell's Book Services and R.R. Bowker. Used with permission.