

Increased emotional engagement in game-based learning – A machine learning approach on facial emotion detection data
Ninaus, M., Greipl, S., Kiili, K., Lindstedt, A., Huber, S., Klein, E., Karnath, H. O. & Moeller, K., 1 Dec 2019, In :
Computers and Education. 142, 103641.

Research output: Contribution to journal › Article › Scientific › peer-review

An icon that everyone wants to click: How perceived aesthetic qualities predict app icon successfulness

Jylhä, H. & Hamari, J., 1 Oct 2019, In : International Journal of Human Computer Studies. 130, p. 73-85 13 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Comparing Three Methods to Capture Multidimensional Service Experience in Children's Health Care: Video Diaries, Narratives, and Semistructured Interviews

Litovuo, L., Karisalmi, N., Aarikka-Stenroos, L. & Kaipio, J., 7 Mar 2019, In : International Journal of Qualitative Methods. 18

Research output: Contribution to journal › Article › Scientific › peer-review

How do academics experience use of recorded audio feedback in higher education? A thematic analysis

Heimbirger, A., Isomottonen, V., Nieminen, P. & Keto, H., 4 Mar 2019, *Frontiers in Education: Fostering Innovation Through Diversity, FIE 2018 - Conference Proceedings*. IEEE, 8658635. (Proceedings - Frontiers in Education Conference).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

An exploration of longitudinal studies of digital learning

Harju, V., Koskinen, A. & Pehkonen, L., 2019, In : EDUCATIONAL RESEARCH.

Research output: Contribution to journal › Review Article › Scientific › peer-review

Code ABC hackathons: Teachers as tinkerers

Niemelä, P., Partanen, T., Toivanen, T., Toikkanen, T., Kangas, V. & Översti, M., 2019, *Digital Turn in Schools - Research, Policy, Practice: Proceedings of ICEM 2018 Conference*. Springer International Publishing, p. 157-169 13 p. (Lecture Notes in Educational Technology).

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Collaborative Writing and Knowledge Creation in a Social Media Online Community

Suominen, A. & Jussila, J., 17 Nov 2018, *The Future of Innovation and Technology in Education: Policies and Practices for Teaching and Learning Excellence (Emerald Studies in Higher Education, Innovation and Technology)*. Visvizi, A., Lytras, M. D. & Daniela, L. (eds.). Emerald Group Publishing Ltd., p. 95-109 15 p.

Research output: Chapter in Book/Report/Conference proceeding › Chapter › Scientific › peer-review

Compute mindlessly. Not! map consciously

Niemelä, P., Mikkolainen, V. & Vuorinen, J., 1 Nov 2018, In : Universal Journal of Educational Research. 6, 11, p. 2669-2678 10 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Osaamisperustaisuuden arviointia tentillä

Pyrhönen, V-P., 16 Aug 2018, p. 93. 1 p.

Research output: Other conference contribution › Paper, poster or abstract › Professional

Designing serious games for special user groups-design for somebody approach

Merilampi, S., Koivisto, A. & Sirkka, A., Jul 2018, In : British Journal of Educational Technology. 49, 4, p. 646-658

Research output: Contribution to journal › Article › Scientific › peer-review

Code notes: Designing a low-cost tangible coding tool for/with children

Sabuncuoğlu, A., Erkaya, M., Buruk, O. T. & Göksun, T., 19 Jun 2018, *IDC 2018 - Proceedings of the 2018 ACM Conference on Interaction Design and Children*. ACM, p. 644-649 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Evaluating the effectiveness of a game-based rational number training - In-game metrics as learning indicators

Kiili, K., Moeller, K. & Ninaus, M., 1 May 2018, In : *Computers and Education*. 120, p. 13-28 16 p.

Research output: Contribution to journal › Article › Scientific › peer-review

How to move away from the silos of business management education?

Nisula, K. & Pekkola, S., 3 Apr 2018, In : *Journal of Education for Business*. 93, 3, p. 97-111 15 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Exploring the educational potential of a game-Based math competition

Kiili, K., Ojansuu, K., Lindstedt, A. & Ninaus, M., 1 Apr 2018, In : *International Journal of Game-Based Learning*. 8, 2, p. 14-28 15 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Urbanisoituva yliopistokampus informaalin oppimisen mahdollistajana

Rajaniemi, J., Häkli, J., Rauhala, K. & Sumkin, H., 27 Mar 2018, In : *Aikuiskasvatus*. 2018, 1, p. 18-29 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

An architect's perspective

Poutanen, J., 2018, *Exploring informal learning space in the university: A collaborative approach*. Walton, G. & Matthews, G. (eds.). London, New York: Routledge, p. 48-62 15 p. 4

Research output: Chapter in Book/Report/Conference proceeding › Chapter › Professional

Design principles for simulation games for learning clinical reasoning: A design-based research approach

Koivisto, J. M., Haavisto, E., Niemi, H., Haho, P., Nylund, S. & Multisilta, J., 2018, In : *Nurse Education Today*. 60, p. 114-120 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Elementary math to close the digital skills gap

Niemelä, P. & Valmari, A., 2018, *CSEDU 2018 - Proceedings of the 10th International Conference on Computer Supported Education*. SCITEPRESS, Vol. 2. p. 154-165 12 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Gamification, quantified-self or social networking? Matching users' goals with motivational technology

Hamari, J., Hassan, L. & Dias, A., 2018, In : *User Modeling and User-Adapted Interaction*. 28, 1, p. 35-74 40 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Gamified crowdsourcing: Conceptualization, literature review, and future agenda

Morschheuser, B., Hamari, J., Koivisto, J. & Maedche, A., 1 Oct 2017, In : *International Journal of Human-Computer Studies*. 106, p. 26-43 18 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Vygotsky's Zone of Proximal Development in Connection with Technology-Enhanced Learning Environments

Pyrhönen, V-P., 18 Sep 2017, *Proceedings of the 45th SEFI Annual Conference*. Quadrado, J., Bernardino, J. & Rocha, J. (eds.). European Society for Engineering Education SEFI, p. 1206-1213 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Comparison of time metrics in programming

Leinonen, J., Leppänen, L., Ihanntola, P. & Hellas, A., 14 Aug 2017, *ICER 2017 - Proceedings of the 2017 ACM Conference on International Computing Education Research*. ACM, p. 200-208 9 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Using and collecting fine-grained usage data to improve online learning materials

Leppänen, L., Leinonen, J., Ihanntola, P. & Hellas, A., 29 Jun 2017, *Proceedings - 2017 IEEE/ACM 39th International Conference on Software Engineering: Software Engineering and Education Track, ICSE-SEET 2017*. IEEE, p. 4-12 9 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Plagiarism in take-home exams: Help-seeking, collaboration, and systematic cheating

Hellas, A., Leinonen, J. & Ihantola, P., 28 Jun 2017, *ITICSE 2017 - Proceedings of the 2017 ACM Conference on Innovation and Technology in Computer Science Education*. ACM, p. 238-243 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Children designing videos: Tools, pedagogical models, and best practices for digital storytelling and media-making in the classroom

Multisilta, J., Niemi, H. & Hamilton, E., 27 Jun 2017, *IDC 2017 - Proceedings of the 2017 ACM Conference on Interaction Design and Children*. ACM, p. 693-696 4 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Preventing keystroke based identification in open data sets

Leinonen, J., Ihantola, P. & Hellas, A., 12 Apr 2017, *L@S 2017 - Proceedings of the 4th (2017) ACM Conference on Learning at Scale*. ACM, p. 101-109 9 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

A teacher? A mentor? A friend? - Teacher mentoring experience at Tampere University of Technology

Niemi, T., Kalliomäki, H. & Pajarre, E., 2017, *Proceedings of the 45th SEFI Annual Conference 2017 - Education Excellence for Sustainability, SEFI 2017*. European Society for Engineering Education SEFI, p. 1352-1361 10 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

From theories to game mechanics: Developing a game for training rational numbers

Kiili, K., 2017, *Proceedings of the 11th European Conference on Games Based Learning, ECGBL 2017*. Academic Conferences and Publishing International Limited, p. 328-334 7 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Hobbyists as a super group of user-centred innovation - Case CreamSound guitar amplifier

Salmela, E., Häkkinen, K. & Rantala, J., 2017, In : *International Journal of Innovation and Learning*. 21, 2, p. 223-245 23 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Internet of Things: Opportunities for vocational education and training: Presentation of the pilot project

Vihervaara, J. & Alapaholuoma, T., 2017, *CSEdu 2017 - Proceedings of the 9th International Conference on Computer Supported Education*. SCITEPRESS, p. 476-480 5 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Vygotsky's zone of proximal development in connection with technology-enhanced learning environments

Pyrhönen, V. P., 2017, *Proceedings of the 45th SEFI Annual Conference 2017 - Education Excellence for Sustainability, SEFI 2017*. European Society for Engineering Education SEFI, p. 1206-1213 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Learning by playing: A cross-sectional descriptive study of nursing students' experiences of learning clinical reasoning

Koivisto, J. M., Multisilta, J., Niemi, H., Katajisto, J. & Eriksson, E., 1 Oct 2016, In : *Nurse Education Today*. 45, p. 22-28 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Affective experiences and student engagement in higher education

Helander, N., Boedeker, M., Hellsten, P., Jussila, J., Myllärniemi, J. & Tukiainen, M., 13 Sep 2016, *44th Annual Conference Of The European Society For Engineering Education: 12-15 September 2016, Tampere, Finland*. Tampere

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Students as mystery shoppers: lowering knowledge sharing barriers in higher education

Tukiainen, M. O., 13 Sep 2016, *44th Annual Conference Of The European Society For Engineering Education: 12-15 September 2016, Tampere, Finland*. Tampere

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Dynamic software updating techniques in practice and Educator's guides: A review

Ilvonen, V., Ihantola, P. & Mikkonen, T., 19 May 2016, *2016 IEEE 29th International Conference on Software Engineering Education and Training (CSEET)*. IEEE, p. 86-90 5 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

First-principles data set of 45,892 isolated and cation-coordinated conformers of 20 proteinogenic amino acids

Ropo, M., Schneider, M., Baldauf, C. & Blum, V., 16 Feb 2016, In : *Scientific Data*. 3, 160009.

Research output: Contribution to journal > Article > Scientific > peer-review

Computer-supported collaborative learning: Praxes in new cell-oriented configurable PC-classroom

Pyrhönen, V-P., Seppälä, J. & Salmenperä, M., 2016, *SEFI conference 2016: Engineering Education on Top of the World: Industry University Cooperation*. 9 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Digital storytelling promoting twenty-first century skills and student engagement

Niemi, H. & Multisilta, J., 2016, In : *Technology, Pedagogy and Education*. 25, 4, p. 451-468

Research output: Contribution to journal > Article > Scientific > peer-review

Enhancing old laboratory experiment using flipped learning: Towards self-regulating collaborative groups in blended learning environment

Pyrhönen, V-P., 2016, *SEFI conference 2016: Engineering Education on Top of the World: Industry University Cooperation*. 9 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

How to benefit from learning logs in engineering education?

Juuti, T., Kopra, M. J., Rättyä, K. & Lehtonen, T., 2016, *44th Annual Conference of the European Society for Engineering Education - Engineering Education on Top of the World: Industry-University Cooperation, SEFI 2016*. European Society for Engineering Education SEFI

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Leadership instead of grading - The new goals of assessment

Lehtonen, T., Juuti, T., Vanhatalo, M., Kopra, M. J. & Rättyä, K., 2016, *44th Annual Conference of the European Society for Engineering Education - Engineering Education on Top of the World: Industry-University Cooperation, SEFI 2016*. European Society for Engineering Education SEFI, 8 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Learning logs in product development education

Juuti, T., Rättyä, K. & Lehtonen, T., 2016, *Proceedings of the 18th International Conference on Engineering and Product Design Education: Design Education: Collaboration and Cross-Disciplinarity, E and PDE 2016*. Institution of Engineering Designers, The Design Society, p. 296-301 6 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

Self-regulation and competence in work-based learning

Nokelainen, P., Kaisvuo, H. & Pylväs, L., 2016, *Competence-based Vocational and Professional Education. Bridging the Worlds of Work and Education : Bridging the Worlds of Work and Education*. Mulder, M. (ed.). Springer US, p. 775-793 (Technical and Vocational Education and Training: Issues, Concerns and Prospects; vol. 23).

Research output: Chapter in Book/Report/Conference proceeding > Chapter > Scientific > peer-review

STACK assignments in university mathematics education

Mäkelä, A-M., Ali-Löytty, S., Humaloja, J-P., Joutsenlahti, J., Kauhanen, J. & Kaarakka, T., 2016, *Proceedings of the 44th SEFI Conference, 12 - 15 September 2016, Tampere, Finland*. European Society for Engineering Education SEFI, 14 p.

Research output: Chapter in Book/Report/Conference proceeding > Conference contribution > Scientific > peer-review

When teaching gets tough – Professional community inhibitors of teacher-targeted bullying and turnover intentions

Pyhältö, K., Pietarinen, J. & Soini, T., 1 Nov 2015, In : *IMPROVING SCHOOLS*. 18, 3, p. 263-276 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Teachers professional agency and learning-from adaption to active modification in the teacher community

Pyhälto, K., Pietarinen, J. & Soini, T., 3 Oct 2015, In : TEACHERS AND TEACHING: THEORY AND PRACTICE. 21, 7, p. 811-830 20 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Exploring co-learning behavior of conference participants with visual network analysis of Twitter data

Aramo-Immonen, H., Jussila, J. & Huhtamäki, J., Oct 2015, In : Computers in Human Behavior. 51, Part B, p. 1154–1162 9 p.

Research output: Contribution to journal › Article › Scientific › peer-review

What contributes to first-year student teachers sense of professional agency in the classroom?

Soini, T., Pietarinen, J., Toom, A. & Pyhälto, K., 18 Aug 2015, In : TEACHERS AND TEACHING: THEORY AND PRACTICE. 21, 6, p. 641-659 19 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Enhancing the experience of online users of open education

AbuJarour, SA., Bick, M., Pawlowski, J., Volungeviciene, A., Trepule, E., Bagucanskyte, M., Pirkkalainen, H., Ehlers, U. D., Hudak, R., Makropoulos, C., Pappa, D., Pitsilis, V., Vidalis, A. & Tannhauser, A. C., 13 Jan 2015, *2014 International Conference on Web and Open Access to Learning, ICWOAL 2014*. Institute of Electrical and Electronics Engineers Inc., 7009217

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Cultural influence on online community use: A cross-cultural study on online exercise diary users of three nationalities

Malinen, S. & Nurkka, P., 2015, In : International Journal of Web Based Communities. 11, 2, p. 153-169 17 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Design principles for collaboration platforms for open education

AbuJarour, S., Pirkkalainen, H., Pawlowski, J., Bick, M., Bagucanskyte, M., Frankenberg, A., Hudak, R., Makropoulos, C., Pappa, D., Pitsilis, V., Tannhauser, A. C., Trepule, E., Vidalis, A. & Volungeviciene, A., 2015, *CSEDU 2015 - 7th International Conference on Computer Supported Education, Proceedings*. SCITEPRESS, Vol. 1. p. 349-359 11 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Dynamic text presentation in print interpreting - An eye movement study of reading behaviour

Sharmin, S., Špakov, O. & Rähkä, K. J., 2015, In : International Journal of Human-Computer Studies. 78, p. 17-30 14 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Preoperative simulation for the planning of microsurgical clipping of intracranial aneurysms

Marinho, P., Vermandel, M., Bourgeois, P., Lejeune, J. P., Mordon, S. & Thines, L., 20 Dec 2014, In : SIMULATION IN HEALTHCARE. 9, 6, p. 370-376 7 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Analysis of source code snapshot granularity levels

Vihavainen, A., Luukkainen, M. & Ihantola, P., 14 Oct 2014, *SIGITE 2014 - Proceedings of the 15th Annual Conference on Information Technology Education*. Association for Computing Machinery, Inc, p. 21-26 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Automatically detectable indicators of programming assignment difficulty

Ihantola, P., Sorva, J. & Vihavainen, A., 14 Oct 2014, *SIGITE 2014 - Proceedings of the 15th Annual Conference on Information Technology Education*. Association for Computing Machinery, Inc, p. 33-38 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Understanding social OER environments-A quantitative study on factors influencing the motivation to share and collaborate

Pirkkalainen, H., Jokinen, J. P. P. & Pawlowski, J. M., 1 Oct 2014, In : IEEE Transactions on Learning Technologies. 7, 4, p. 388-400 13 p., 6823168.

Research output: Contribution to journal › Article › Scientific › peer-review

Challenges and instructors' intention to adopt and use open educational resources in higher education in tanzania
Mtebe, J. S. & Raisamo, R., 2014, In : INTERNATIONAL REVIEW OF RESEARCH IN OPEN AND DISTANCE LEARNING. 15, 1, p. 249-271 23 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Comprehensive school teachers' professional agency in large-scale educational change

Pyhältö, K., Pietarinen, J. & Soini, T., 2014, In : JOURNAL OF EDUCATIONAL CHANGE. 15, 3, p. 303-325 23 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Eye tracking in computing education

Busjahn, T., Schulte, C., Sharif, B., Simon, Begel, A., Hansen, M., Bednarik, R., Orlov, P., Ihantola, P., Shchekotova, G. & Antropova, M., 2014, *ICER 2014 - Proceedings of the 10th Annual International Conference on International Computing Education Research*. Association for Computing Machinery, p. 3-10 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Investigating perceived barriers to the use of open educational resources in higher education in tanzania

Mtebe, J. S. & Raisamo, R., 2014, In : INTERNATIONAL REVIEW OF RESEARCH IN OPEN AND DISTANCE LEARNING. 15, 2, p. 43-66 24 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Overcoming cultural distance in social OER environments

Pirkkalainen, H., Jokinen, J. P. P., Pawlowski, J. M. & Richter, T., 2014, *CSEDU 2014 - Proceedings of the 6th International Conference on Computer Supported Education*. SCITEPRESS, Vol. 1. p. 15-24 10 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Professional knowledge, skills and competencies of the new graduates and the engineering professionals - Comparison of the importance in working-life

Hyötynen, P., Mursu, S. & Teini, J.-P., 2014, *SEFI Annual Conference 2014*. Brussel: European Society for Engineering Education SEFI

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Strategies for academic engagement perceived by Finnish sixth and eighth graders

Ulmanen, S., Soini, T., Pyhältö, K. & Pietarinen, J., 2014, In : CAMBRIDGE JOURNAL OF EDUCATION. 44, 3, p. 425-443 19 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Students' emotional and cognitive engagement as the determinants of well-being and achievement in school

Pietarinen, J., Soini, T. & Pyhältö, K., 2014, In : INTERNATIONAL JOURNAL OF EDUCATIONAL RESEARCH. 67, p. 40-51 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Teachers' professional beliefs about their roles and the pupils' roles in the school

Ahonen, E., Pyhältö, K., Pietarinen, J. & Soini, T., 2014, In : TEACHER DEVELOPMENT. 18, 2, p. 177-197 21 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Reducing teacher burnout: A socio-contextual approach

Pietarinen, J., Pyhältö, K., Soini, T. & Salmela-Aro, K., Oct 2013, In : TEACHING AND TEACHER EDUCATION. 35, p. 62-72 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

How do ninth-graders perceive their involvement in the most meaningful episodes of their school career?

Westling, S. K., Pyhältö, K., Pietarinen, J. & Soini, T., 2013, In : INTERNATIONAL JOURNAL OF EDUCATIONAL RESEARCH. 58, p. 25-35 11 p.

Research output: Contribution to journal › Article › Scientific › peer-review

How do students solve parsons programming problems? - Execution-based vs. line-based feedback

Helminen, J., Ihantola, P., Karavirta, V. & Alaoutinen, S., 2013, *Proceedings - 2013 Learning and Teaching in Computing and Engineering, LaTiCE 2013*. p. 55-61 7 p. 6542239

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

The innovations in learning and education SAVI

Hamilton, E. & Multisilta, J., 2013, *Computer-Supported Collaborative Learning Conference, CSCL*. Vol. 2. p. 511-512 2 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Touch gestures in communicating emotional intention via vibrotactile stimulation

Rantala, J., Salminen, K., Raisamo, R. & Surakka, V., 2013, In : *International Journal of Human-Computer Studies*. 71, 6, p. 679-690 12 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Do comprehensive school teachers perceive themselves as active professional agents in school reforms?

Pyhältö, K., Pietarinen, J. & Soini, T., Feb 2012, In : *JOURNAL OF EDUCATIONAL CHANGE*. 13, 1, p. 95-116 22 p.

Research output: Contribution to journal › Article › Scientific › peer-review

A Mobile learning application for parsons problems with automatic feedback

Karavirta, V., Helminen, J. & Ihantola, P., 2012, *Proceedings - 12th Koli Calling International Conference on Computing Education Research, Koli Calling 2012*. p. 11-18 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Exploring facilities management - Towards future campuses

Rytkönen, E., Nenonen, S. & Kärnä, S., 2012, *Proceedings of the 40th SEFI Annual Conference 2012 - Engineering Education 2020: Meet the Future*. European Society for Engineering Education SEFI

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

How do students solve parsons programming problems? - An analysis of interaction traces

Helminen, J., Ihantola, P., Karavirta, V. & Malmi, L., 2012, *ICER'12 - Proceedings of the 9th Annual International Conference on International Computing Education Research*. p. 119-126 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Knowledge management through learning model in industrial projects

Aramo-Immonen, H., 2012, In : *International Journal of Knowledge and Learning*. 8, 3-4, p. 298-312 15 p.

Research output: Contribution to journal › Article › Scientific › peer-review

A systemic perspective on school reform: Principals' and chief education officers' perspectives on school development

Pyhältö, K., Soini, T. & Pietarinen, J., Jan 2011, In : *JOURNAL OF EDUCATIONAL ADMINISTRATION*. 49, 1, p. 46-61 16 p.

Research output: Contribution to journal › Article › Scientific › peer-review

Teaching cross-platform design and testing methods for embedded systems using DICE

Bhattacharyya, S. S., Plishker, W., Shen, C. C. & Gupta, A., 2011, *Proceedings - 2011 Workshop on Embedded Systems Education, WESE 2011*. p. 38-45 8 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review

Integrated design framework: Towards an approach for early design

Christophe, F., Sell, R., Coatanea, E. & Micaëlli, J. P., 2008, *DS 46: Proceedings of E and PDE 2008, the 10th International Conference on Engineering and Product Design Education*. 6 p.

Research output: Chapter in Book/Report/Conference proceeding › Conference contribution › Scientific › peer-review