

Merja Bauters  
Dosentisopimus, dosentuuri  
Filosofian, historian ja taiteiden tutkimuksen osasto  
Tiedekunnan yhteiset (Humanistinen tiedekunta)  
Sähköposti: merja.bauters@helsinki.fi



## Julkaisut

### Transformed knowledge work infrastructures in times of forced remote work

Paavola, S., Lakkala, M., Folger, L., Preegel, K., Kokkonen, J., Bardone, E. & Bauters, M., kesäk. 2025, julkaisussa: Information and Organization. 35, 2, 15 Sivumäärä, 100563.

### Designing a Communication App for Privacy: A Scenario-Based and Participatory Approach

Maria Parrilli, D., Afolayan Ogunyemi, A., Bauters, M. & Hernández-Ramírez, R., 2025, *Advances in Design and Digital Communication V*. Martins, N. & Brandão, D. (toim.). Springer Nature Switzerland

### Systematic literature review of digital and green transformation of manufacturing SMEs in Europe

Abilakimova, A., Bauters, M. & Afolayan Ogunyemi, A., 27 jouluk. 2024, julkaisussa: Manufacturing Research and Technology. 13, 1, 28 Sivumäärä, 2443166.

### AI Guidelines and Ethical Readiness Inside SMEs: A Review and Recommendations

Seoudy Ibrahim, M. S. M. & Bauters, M., 2024, julkaisussa: Digital Society. 3, 3

### Ecosystems for knowledge transfer and creation

Bauters, M. & Abilakimova, A., 2024, *The XXXV ISPIM Innovation Conference: held in Tallinn, Estonia on 09 June to 12 June 2024*. Acosta Llano, E., Bitran, I., Bitetti, L. & Conn, S. (toim.). Kouvola: International Society for Professional Innovation Management , s. 1-6 6 Sivumäärä (ISPIM Innovation Conference Proceedings).

### Embodied Learning – Are We Losing It?

Bauters, M., 2024, *Innovative Technologies and Learning. ICITL 2024..* Cheng, Y., Pedaste, M., Bardone, E. & Huang, Y. (toim.). Springer, Cham, s. 309 - 316 8 Sivumäärä (Lecture Notes in Computer Science ; painos 14785).

### The Exploration of Skill Gaps and Ecosystem Potential among Estonian Creatives

Bauters, M., Tokranova, D., De Silva, L. M. H. & Mets, J., syysk. 2023, julkaisussa: Sustainability. 15, 18, 29 Sivumäärä, 13687.

### Comparing Psychophysiological Responses to Vicarious Pain Experience Elicited by Videos Featuring either Humans or Avatars

Krivich, E., Möttus, M. & Bauters, M., 2023, *26th International Academic Mindtrek Conference .* ACM Digital library, s. 334 - 339 6 Sivumäärä

### Designing a voice-controlled dialogue system for workplace learning of routine physical workers

Afolayan Ogunyemi, A., Berkovitch,, K. J., Einsok,, K.-K., Kõressaar,, U., Prantsu, S.-K., Bauters, M. & Sunney Quaicoe, J., 2023, *4th African Human Computer Interaction Conference (AfriCHI 2023)*, s. 1-7 7 Sivumäärä

### Existential semiotics, semiosis and emotions

Bauters, M., 2023, *Transcending Signs*. Tarasti, E. (toim.). De Gruyter Mouton, s. 289 - 312 24 Sivumäärä (Semiotics, Communication and Cognition [SCC]; painos 35).

### Physicality in thinking

Bauters, M., 2023, *The 13th conference of the Nordic Association for Semiotic Studies Feeling – Skill – Knowledge .* NASS XIII Helsinki conference booklet, s. 71 - 72 2 Sivumäärä

Pragmatism approach to embodied learning at work

Bauters, M., 2023, *The 13th conference of the Nordic Association for Semiotic Studies Feeling – Skill – Knowledge*. s. 15  
1 Sivumäärä

#### **School-Based Digital Innovation Challenges and Way Forward Conversations about Digital Transformation in Education**

Sunney Quaicoe, J., Afolayan Ogunyemi, A. & Bauters, M., 2023, julkaisussa: *Education Sciences*. 13, 4, 21 Sivumäärä, 344.

#### **Student and teacher co-agency when combining CT with arts and design in a cross-curricular project**

Mannila, L. C. Y., Leinonen, T., Bauters, M. & Veermans, M., 2023, julkaisussa: *Computers and Education Open*. 4, 18 Sivumäärä

Applying participatory design principles to collaborative art-creating sessions: Applying participatory design principles to collaborative art-creating sessions

Tokranova, D. & Bauters, M., 2022, *25th International Academic Mindtrek conference (Academic Mindtrek 2022)*. s. 347–353 7 Sivumäärä

#### **Audio-based Learning at Work: Preliminary Results of an Exploratory Interview Study**

Afolayan Ogunyemi, A. & Bauters, M., 2022, *14th annual International Conference on Education and New Learning Technologies (EDULEARN22)*. IATED Academy, s. 1780–1787 8 Sivumäärä

#### **Culture coding: a method for diversifying artefact associations in design ideation**

Pejoska, J., Durall, E., Bauters, M. & Leinonen, T., 2022, julkaisussa: *International journal of design creativity and innovation*. 10, 3, s. 161-178 18 Sivumäärä

#### **Indicators for enhancing learners' engagement in massive open online courses: A systematic review**

Afolayan Ogunyemi, A., Sunney Quaicoe, J. & Bauters, M., 2022, julkaisussa: *Computers and Education Open*. 3, 2666-5573, s. 100088 <https://doi.org/10.1016/j.caeo.2022.100088>.

#### **Are you there? Presence in collaborative distance work**

Bauters, M., Pejoska, J., Dural, E., Saarikivi, K. A., Wikström, V., Falcon, M. & Martikainen, S., 31 jouluk. 2021, julkaisussa: *Human Technology*. 17, 3, s. 261-293 33 Sivumäärä, 17.

#### **Heart Rate Sharing at the Workplace**

Wikström, V., Falcon, M., Martikainen, S., Pejoska, J., Dural, E., Bauters, M. & Saarikivi, K. A., 8 lokak. 2021, julkaisussa: *Multimodal Technologies and Interaction*. 5, 10, 27 Sivumäärä, 60.

#### **Methods and practices for supporting inclusion using current video-conferencing tools as learning environments: Methods and practices for supporting inclusion**

Pejoska, J. & Bauters, M., heinäk. 2021, s. 180–182. 3 Sivumäärä.

#### **Agile and Lean Methods with Design Thinking**

Pata, K., Bauters, M., Vesikivi, P. & Holvikivi, J., 2021, *Technology Supported Active Learning: Student-Centered Approaches*. Vaz de Carvalho, C. & Bauters, M. (toim.). Singapore: Springer, s. 13-30 18 Sivumäärä (Lecture Notes in Educational Technology).

#### **Agile Methodologies in Learning with Design Thinking**

Vesikivi, P., Bauters, M. & Holvikivi, J., 2021, *Technology Supported Active Learning : Student-Centered Approaches*. Vaz de Carvalho, C. & Bauters, M. (toim.). Singapore: Springer, s. 75-90 16 Sivumäärä (Lecture Notes in Educational Technology).

#### **Designing for Active Engagement in Online Learning Environments**

Afolayan Ogunyemi, A., Bauters, M., Pejoska, J. & Sunney Quaicoe, J., 2021, *3rd African Human-Computer Interaction Conference. ACM*. ACM Digital library, s. 176–179 4 Sivumäärä

**Design Thinking as a Collaborative Learning Design Tool for Teachers**

Bauters, M. & Vesikivi, P., 2021, *Technology Supported Active Learning*. Bauters, M. & Vaz de Carvalho, C. (toim.). Springer, s. 125–144 35 Sivumäärä (Lecture Notes in Educational Technology ).

**SEMIOOTTINEN ANALYYSI**

Bauters, M., 2021, Yhteiskuntatieteellinen tietoarkisto (FSD).

**Technology Supported Active Learning**

Vaz de Carvalho, C. & Bauters, M., 2021, Springer Singapore. 188 Sivumäärä (Lecture Notes Educational Technology; painos 1)

**Technology to Support Active Learning in Higher Education**

Bauters, M., 2021, *Technology Supported Active Learning*. Bauters, M. & Vaz de Carvalho, C. (toim.). Springer, s. 1–11 11 Sivumäärä (Lecture Notes in Educational Technology).

**Tailoring ethical learning technology**

Pejoska, J., Bauters, M., Vasarainen, M., Valisalo, T. & Mets, J., 11 jouluk. 2020.

**An Overview of the situation of project-based learning in engineering education.**

Bauters, M., Holvikivi, J. & Vesikivi, P., 2020, *SEFI 48th Annual Conference ENGAGING ENGINEERING EDUCATION PROCEEDINGS*. van der Veen, J., van Huttum-Janssen, N., Järvinen, H.-M., de Last, T. & ten Dam, I. (toim.). European Society for Engineering Education, SEFI , s. 52–60 9 Sivumäärä

**Co-creation and co-design in technology enhanced learning: Innovating science learning outside the classroom.**

Dural, E., Bauters, M., Hietala, I., Leinonen, T. & Kapros, E., 2020, julkaisussa: ID&A Interaction design & architecture(s) . s. 202 – 226 25 Sivumäärä, 42.

**Teaching Design Thinking through Gamified Learning**

Tsalapatas, H., Heidmann, O., Pata, K., Vaz de Carvalho, C., Bauters, M., Papadopoulos, S., Katsimendes, C., Taka, C. & Houstis, E., 2019, *Proceedings of the 11th International Conference on Computer Supported Education - Volume 2: CSEDU* . SCITEPRESS Science And Technology Publications , Vuosikerta 2. s. 278–283 6 Sivumäärä

**User generated soundscapes activating museum visitors**

Salo, K., Bauters, M. & Mikkonen, T., 13 kesäk. 2017, *SAC 2017 Symposium on Applied Computing* . Shin, S. Y., Shin, D. & Lencastre, M. (toim.). New York: ACM New York, s. 220–227 8 Sivumäärä

**Tangibility of Sharing Experiences**

Bauters, M. L. M., kesäk. 2017, *Beyond the Ordinary: Aiming Higher in Higher Education* . Ranta-Meyer, T. (toim.). Espoo: Helsinki Metropolia, University of Applied Sciences , s. 31–39 8 Sivumäärä (Perspectives and Practises in HTW Berlin and Metropolia UAS Partnership 2017).

**A phronetic approach to educational design-based research: Issues and aspirations**

Bauters, M. & Bardone, E., tammik. 2017, julkaisussa: EDeR – Educational Design Research An International Journal for Design-Based Research in Education. 1, 1, uhh.de/EDeR.

**Experience in design and learning approaches: enhancing the framework for experience**

Bauters, M. L. M., 2017, julkaisussa: Romanian Journal of Communication and Public Relations. 19, 1, s. 51-68 18 Sivumäärä

**Modular Audio Story Platform for Museums**

Bauters, M., Salo, K., Zinin, V. & Mikkonen, T., 2017, *Proceedings of the 22nd International Conference on Intelligent User Interfaces Companion*. New York: ACM Digital library, s. 113-116 4 Sivumäärä

**Social augmented reality: Enhancing context-dependent communication and informal learning at work**  
Pejoska, J., Bauters, M., Purma, J. & Leinonen, T., toukok. 2016, julkaisussa: British Journal of Educational Technology. 47, 3, s. 474-483 10 Sivumäärä

**Mobile Soundscape Mixer – Ready for Action**

Salo, K., Bauters, M. & Mikkonen, T., 2016, *Mobile Web and Information Systems: 13th International Conference, MobiWIS 2016, Vienna, Austria, August 22-24, 2016, Proceedings*. Younas, M., Awan, I., Kryvinska, N., Strauss, C. & van Thanh, D. (toim.). Springer International Publishing AG, s. 18-30 13 Sivumäärä (Lecture Notes in Computer Science; painos 9847).

**Teaching working life skills in IT through collaborative practices**

Holvikivi, J., Muukkonen, H., Vesikivi, P. & Bauters, M., 2016, *Proceedings of the SEFI Annual Conference 2016: Engineering Education on Top of the World: Industry University Cooperation*. European Society for Engineering Education, SEFI

**Creating and Sharing Knowledge Through Experiences: A Case Study with Ach sol in Healthcare Education**

Bauters, M., Virnes, M., Purma, J. & Leinonen, T., 2015, *Design for Teaching and Learning in a Networked World : 10th European Conference on Technology Enhanced Learning, EC-TEL 2015 Toledo, Spain, September 15–18, 2015 Proceedings*. Conole, G., Klobučar, T., Rensing, C., Konert, J. & Lavoué, É. (toim.). Cham: Springer International Publishing AG, s. 642-645 4 Sivumäärä (Lecture Notes in Computer Science ; painos 9307).

**A Community Information System for Ubiquitous Informal Learning Support**

Bauters, M., Nicolaescu, P., Renzel, D., Koren, I., Klamma, R. & Purma, J., heinäk. 2014, *IEEE 14th International Conference on Advanced Learning Technologies (ICALT), 2014 : ICALT 2014*. Sampson, D. G., Spector, J. M., Chen, N.-S., Huang, R. & K. (toim.). Danvers, MA: Institute of Electrical and Electronics Engineers, s. 138-140 3 Sivumäärä 10.1109/ICALT.2014.48

**Design Review of Requirements Bazaar from a Pragmatism Perspective**

Bauters, M. L. M. & Purma, J., 2014, julkaisussa: STCSN E-Letter. 2, 3

**Towards a Design Research Framework for Designing Support Informal Work-Based Learning**

Bauters, M. L. M., Cook, J., Bannon, B., Schmidt, A. & Leinonen, T., 2013, *ECTEL meets ECSCW 2013, the Workshop on Collaborative Technologies for Working and Learning co-located with 8th European Conference on Technology-Enhanced Learning (ECTEL 2013) and with the European Conference on Computer-Supported Cooperative Work 2013 (ECSCW 2013)*. Divitini, M., Ley, T., Lindsteadt, S., Pammer, V. & Prilla, M. (toim.). s. 1-5

**Emanuele Bardone: Seeking chances: from biased rationality to distributed cognition**

Bauters, M., kesäk. 2012, julkaisussa: Mind & Society. 11, 2, s. 257-264

**KPE (Knowledge Practices Environment) supporting knowledge creation practices in education**

Bauters, M., Lakkala, M., Paavola, S., Kosonen, K. & Markkanen, H., 2012, *Collaborative Knowledge Creation: Practices, Tools, Concepts*. Moen, A., Mørch, A. I. & Paavola, S. (toim.). Rotterdam: Sense publishers, s. 53-74 22 Sivumäärä (Technology enhanced learning; painos Vol. 7).

**Semiotics' contribution into the analysis of popular culture**

Bauters, M. L. M., 2012, *Being Cultural*. Cohen, B. (toim.). University of Auckland New Zealand : Pearson PLC, 15 Sivumäärä

**KPE (Knowledge Practices Environment) Supporting Knowledge Creation Practice**

Bauters, M., Paavola, S., Lakkala, M., Kosonen, K. & Markkanen, H., marrask. 2011, *The International Conference on Information and Communication Technologies and Applications (ICTA 2011) : The International Conference on Information Design and Modeling in Science, Education, and Technology (DeMset 2011)*. Callaos, N., Savoie, M., Siddique, M. & Zinn, C. D. (toim.). Winter Garden, Florida: International Institute of Informatics and Systemics, s. 84-89 6 Sivumäärä

### **Pragmatic Knowledge Services**

Pohjola, M. V., Pohjola, P., Paavola, S., Bauters, M. & Tuomisto, J. T., 2011, julkaisussa: Journal of Universal Computer Science. 17, 3, s. 472-497 26 Sivumääärä

### **Tiedonluominen ja sosiaalinen media korkeakoulutuksessa: Suorittamisesta yhdessä luomiseen ja arvointiin**

Muukkonen, H. & Bauters, M. L. M., 2011, *Silmät auki sosiaaliseen mediaan..* Rainio, H., Vartiainen, T., Aaltonen-Ogabeide, T. & Saastamoinen, P. (toim.). Eduskunnan tulevaisuusvaliokunta, Vuosikerta 3/2011. s. 126–146 20 Sivumääärä

### **Triangular learning supported by Knowledge Practices Environment**

Paavola, S., Bauters, M., Richter, C., Damsa, C., Karlgren, K., Saarivesi, E., Toikka, S., Lakkala, M., Muukkonen, H. & Ilomäki, L., 2011, *Connecting Computer-Supported Collaborative Learning to Policy and Practice: CSCL2011 Conference Proceedings Volume III — Community Events Proceedings.* Spada, H., Stahl, G., Miyake, N. & Law, N. (toim.). ISLS International Society of the Learning Sciences, Vuosikerta Volume 3. s. 1150-1153 4 Sivumääärä

### **Käyttäjäkeskeinen suunnittelu ja käyttäjät kehittäjinä –orientoituneisuus**

Bauters, M., 2009, *Luova työ tutkimuksen kohteena.: Avauksia design-alojen tutkimusmetodologiaan.* Mäkelä-Marttinen, L. (toim.). Kouvolan (Kymenlaakson ammattikorkeakoulun julkaisuja. Sarja A. Oppimateriaali; nro 23).

### **Main functionalities of the Knowledge Practices Environment (KPE) affording knowledge creation practices in education**

Lakkala, M., Paavola, S., Kosonen, K., Muukkonen, H., Bauters, M. & Markkanen, H., 2009, [Computer Supported Learning Practices]: proceedings of the 9th International Conference on Computer Supported Collaborative Learning [CSCL2009], Rhodes, Greece, June 8-13, 2009 : Volume 1, / Editors: Claire O'Malley, Daniel Suthers, Peter Reimann, Angelique Dimitracopoulou. O'Malley, C., Suthers, D., Reimann, P. & Dimitracopoulou, A. (toim.). ISLS International Society of the Learning Sciences, s. 297-306 10 Sivumääärä

### **Tools for synchronous communications in collaborative Knowledge Practices Environment (KPE)**

Furnadzhiev, I., Tchoumatchenko, V., Vasileva, T., Lakkala, M. & Bauters, M., 2009, *Research, reflections and innovations in integrating ICT in education. Vol. 1.* Mendez-Vilas, A., Solano Martin, A. & Mesa Gonzalez, J. (toim.). Badajoz: Formatax, s. 588-592 5 Sivumääärä

Complexity, biosemiotics and semiotic freedom: The whole creature : complexity, biosemiotics and the evolution of culture  
Bauters, M., 2008, julkaisussa: American Journal of Semiotics. 24, 1/3

### **Knowledge practices environment: Design and application of technology for triangular learning**

Bauters, M. L. M., Damsa, C. & Patrick, S., 2008, *Times of Convergence: Technologies Across Learning Contexts: the third European Conference on Technology- Enhanced Learning (ECTEL) .* Dillenbourg, P. & Specht, M. (toim.). Berlin: Springer-Verlag, s. 419-430 11 Sivumääärä (Lecture notes in computer science; nro 5192).

### **Multiple Determination and Association: Peirce's Model of Mediation Applied to Visual Signs**

Bauters, M., 2008, *Global Signs : Proceedings from the ISI Summer Congresses at Imatra in 2003-2006.* Tarasti, E. (toim.). Imatra: International Semiotics Institute, s. 122-129 8 Sivumääärä (Acta Semiotica Fennica; painos 29).

### **The knowledge Practices Environment: A virtual environment for collaborative knowledge creation and work around shared artefacts**

Bauters, M. L. M., Markkanen, H., Holi, M., Benmergui, L. & Richter, C., 2008, *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2008.* s. 5035-5040

### **Changes in Beer Labels and their Meaning: A Holistic Approach to the Semiotic Process**

Bauters, M., 2007, Imatra : Helsinki: International Semiotics Institute. 228 Sivumääärä

### **Mediation Seen through the Sensory Eye: An Alternative to the 'Old' and 'New' Media Paradigm**

Bauters, M., 2007, julkaisussa: International Journal of Applied Semiotics. 6 , 1, s. 1-122 121 Sivumääärä

Global'/General (Western) Beer Signs: The Case of Italy and Finland  
Bauters, M., 2006, *Finland – Italy: A few comparisons*. Martinelli, D. & Navickaitė, L. (toim.). Helsinki: UMWEB, 16 Sivumäärä (UMWEB).

#### **Semiosis of (Target) Groups: Peirce, Mead and the Subject**

Bauters, M., 2006, julkaisussa: Subject Matters. 2, 2, s. 73–102 30 Sivumäärä

#### **S for Sinebrychoff**

Bauters, M., 2004, *Semiotics from S to S*. Bauters, M., Ipsen, G. & Martinelli, D. (toim.). Dortmund/Helsinki: UMWEB, 18 Sivumäärä

#### **S for Sixty-nine**

Bauters, M., 2004, *Semiotics from S to S*. Bauters, M., Ipsen, G. & Martinelli, D. (toim.). UMWEB, 16 Sivumäärä

### **Projektit**

#### **KP-Lab: Developing Knowledge-Practices Laboratory**

Bauters, M. (Projektinjohtaja)  
01/01/2007 → 25/12/2011

#### **Learning Layers, Scaling up Technologies for Informal Learning in SME Clusters**

Bauters, M. (Osallistuja)  
01/11/2012 → 30/11/2016

#### **Learning Layers, Scaling up Technologies for Informal Learning in SME Clusters**

Pejoska, J. (Osallistuja) & Bauters, M. (Projektinjohtaja)  
01/11/2012 → 30/11/2016

#### **Quantifying Human Experience for Increased Intelligence Within Work Teams and in the Customer Interface**

Pejoska, J. (Osallistuja), Bauters, M. (Projektinjohtaja), Saarikivi, K. A. (Principal Investigator), Wikström, V. (Osallistuja), Falcon, M. (Osallistuja), Martikainen, S. (Osallistuja), Durall, E. (Osallistuja) & Leinonen, T. (Projektinjohtaja)  
01/01/2018 → 30/06/2020

#### **youwatchit**

Bauters, M. (Projektinjohtaja) & Saro, E. (Projektinjohtaja)  
01/02/2000 → 21/12/2000