

Cord Hockemeyer

Researcher – Computer Science and Psychology



Institute of Psychology, Cognitive Psychology & Neuroscience
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📄 orcid.org/0000-0002-1043-7498 (full list of publications)

📄 publons.com/researcher/2389701/cord-hockemeyer/

🎓 Academic Qualification

1993	Master degree (Dipl.-Inform.) in Computer Science from Technische Universität Braunschweig, Germany. Thesis on knowledge assessment using knowledge structures – Supervisor Prof. Dr. Cornelia E. Dowling
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🏛️ Professional and Academic Positions

1996 – today	Researcher at University of Graz, Institute of Psychology
2009 – 2011	Project Manager at Graz University of Technology, Knowledge Management Institute
1993 – 1996	PostGraduate Researcher at Technische Universität Braunschweig, Institute of Psychology

🔍 Research Areas and Results

Knowledge assessment Development of procedures for computationally efficient adaptive assessment of knowledge.

Personalised e-learning Applying prerequisite structures within domains of knowledge to foster personalised e-learning.

Additional Research Achievements

Grants

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| 1994 – 1996 | Postgraduate fellowship funded by the German state of Lower Saxony |
| 1998 – 1999 | Marie Curie fellowship funded by the European Commission
in the Training and Mobility of Researchers programme |
| 2012 – 2014 | Erasmus Intensive Programme: AQuAPP
(A Quantitative Approach to Psychological Processes: Modeling, Testing, Fitting)
funded by the European Commission (as partner) |
| 2015 – 2018 | Erasmus+ project TquanT (Tools for Teaching Quantitative Thinking)
funded by the European Commission (as partner) |
| 2019 – 2022 | Erasmus+ project QHELP
(Higher Education Learning Platform for Quantitative Thinking)
funded by the European Commission (as partner) |

Editorials

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| 2016 – today | Testing, Psychometrics, Methodology in Applied Psychology (TPM),
Member of the Editorial Board |
| 2009 | STEG'09: Story–Telling and Educational Games,
Co–editor |

📖 Selected Publications (full list on Orcid)

- [1] T. Augustin, C. Hockemeyer, R. Suck, P. Podbregar, M. D. Kickmeier-Rust, and D. Albert. Individualized skill assessment in educational games: The mathematical foundations of partitioning. *Journal of Mathematical Psychology*, 67:1–7, 2015.
- [2] D. Breen, A. Aboulafia, D. Zhang, C. Hockemeyer, D. Albert, and G. Shorten. Defining a competence map for a practical skill. *The Clinical Teacher*, 11(7):531–536, 2014.
- [3] T. Augustin, C. Hockemeyer, M. D. Kickmeier-Rust, P. Podbregar, R. Suck, and D. Albert. The simplified updating rule in the formalization of digital educational games. *Journal of Computational Sciences*, 4:293–303, 2013.
- [4] T. Augustin, C. Hockemeyer, M. Kickmeier-Rust, and D. Albert. Individualized skill assessment in digital learning games: Basic definitions and mathematical formalism. *IEEE Transactions on Learning Technologies*, 4:138–148, 2011.
- [5] C. Hockemeyer, A. Nussbaumer, E. Lövquist, A. Aboulafia, D. Breen, G. Shorten, and D. Albert. Applying a web and simulation-based system for adaptive competence assessment of spinal anaesthesia. In M. Spaniol, Q. Li, R. Klamma, and R. Lau, editors, *Advances in Web-Based Learning — ICWL 2009*, Lecture Notes in Computer Science, pages 182–191, Berlin, 2009. Springer Verlag.
- [6] J. Heller, C. Steiner, C. Hockemeyer, and D. Albert. Competence-based knowledge structures for personalised learning. *International Journal on E-Learning*, 5(1):75–88, 2006.
- [7] C. Hockemeyer, O. Conlan, V. Wade, and D. Albert. Applying competence prerequisite structures for eLearning and skill management. *Journal of Universal Computer Science*, 9:1428–1436, 2003.
- [8] S. Brandt, D. Albert, and C. Hockemeyer. Surmise relations between tests - mathematical considerations. *Discrete Applied Mathematics*, 127(2):221–239, 2003.
- [9] C. Hockemeyer. A comparison of non-deterministic procedures for the adaptive assessment of knowledge. *Psychologische Beiträge*, 44:495–503, 2002.
- [10] C. E. Dowling and C. Hockemeyer. Automata for the assessment of knowledge. *IEEE Transactions on Knowledge and Data Engineering*, 13(3):451–461, 2001.
- [11] C. Hockemeyer. Using the basis of a knowledge space for determining the fringe of a knowledge state. *Journal of Mathematical Psychology*, 41:275–279, 1997.