

Publications

- [1] Hörmann, C., Kuka, L., Fraser, A., Sabitzer B.: *Innovation or Imitation? A Critical Analysis of AI-Authored vs. Human-Authored Scientific Papers*. In review process, 2024.
- [2] Kuka, L., Hörmann, C., Sabitzer B.: *AI Wanderlust: A Roadmap to Integrating GenAI Tools in the Classroom Fostering Critical AI Literacy*. In review process, 2024.
- [3] Hörmann, C.: *Quo vadis Digitale Grundbildung? Vom Weg der Umsetzung eines neuen Curriculums in Österreich*. In: OCG Journal. Ausgabe 03, 2023, <https://www.ocg.at/publikationen>.
- [4] Hörmann, C., Schmidthaler, E., Sabitzer, B.: *Navigating the Implementation of the Curriculum Digital Education in Austrian Secondary Schools: Challenges and Teacher Perspectives*. International Conference on Informatics in Schools (ISSEP), Lausanne, October, 2023, https://link.springer.com/chapter/10.1007/978-3-031-44900-0_13.
- [5] Schmidthaler, E., Hörmann, C., Fraser, A., Sabitzer, B.: *Easy Coding in Biology: Combining Block-Based Programming Tasks with Biological Education to Encourage Computational Thinking in Girls*. International Conference on Informatics in Schools (ISSEP), Lausanne, October, 2023, <https://zenodo.org/records/8431893>.
- [6] Schmidthaler, E., Schmollmüller, M., Wimmer-Furian, P., Hörmann, C., Rottenhofer, M., Sabitzer, B.: *Exploring Gender Stereotypes and Sexism in Learning Apps: Insights from Austrian Secondary School Students*. American Journal of Applied Psychology, 12(5): 111-128, September, 2023, <https://doi.org/10.11648/j.ajap.20231205.11>.
- [7] Rottenhofer, M., Hörmann, C., Schmidthaler, E., Sabitzer, B., Groher, I.: *Let IT Dance! Experience Computer Science with Dance and Music*. Austrian Citizen Science Conference, Linz, 2023.
- [8] Hörmann, C., Schmidthaler, E., Sabitzer, B.: *Introducing Digital Education as a Mandatory Subject – The Struggle of the Implementation of a new Curriculum in Austria*. 15th

International Conference on Computer Supported Education (CSEDU), Prague, Czech Republic, April, 2023, <https://tinyurl.com/3fyem45k>.

- [9] Schmidthaler, E., Schalk, M., Schmollmüller, M., Hinterplattner, S., Hörmann, C., Rottenhofer, M., Andrije, B., Lavicza, Z., Sabitzer, B.: *The Interdisciplinary Implementation of Poly-Universe to Promote Computational Thinking: Teaching Examples from Biological, Physical, and Digital Education in Austrian Secondary Schools*. Frontiers in Psychology, Vol. 14, 2023, <https://www.frontiersin.org/articles/10.3389/fpsyg.2023.1139884/full>.
- [10] Schmidthaler, E., Hörmann, C., Rottenhofer, M., Andic, B., Sabitzer, B., Lavica, Z.: *Employment of Mobile Augmented Reality in Biological Education: A Comparison of Perceptions Regarding Austrian Secondary School Teachers and Students*. International Conference on Society for Information Technology and Teacher Education, New Orleans, USA, March 13-17, 2023, <https://tinyurl.com/yw4xykt3>.
- [11] Schmidthaler, E., Hörmann, C., Schalk, M., Sabitzer, B., Lavicza, Z.: *The Importance of a Quality Assessment for Educational Applications: Perceptions of Secondary School Students Regarding Non-Certified Learning Apps*. 14th International Conference on Education Technology and Computers (ICETC), Barcelona, Spain, 2023, <https://dl.acm.org/doi/10.1145/3572549.3572592>.
- [12] Sabitzer, B., Hörmann, C., Kuka, L.: *Entdecken Sie Java 2! Aufgabensammlung mit neurodidaktischer Basis*. Amazon, 2023, <https://amzn.eu/d/4gkRXv5>.
- [13] Hörmann, C., Schmidthaler, E., Kuka, L., Rottenhofer, M., Sabitzer, B.: *From Non-Existent to Mandatory in Five Years – The Journey of Digital Education in Austrian Schools*. International Conference on Informatics in Schools (ISSEP), Vienna, 2022, <https://tinyurl.com/44z92upt>.
- [14] Hörmann, C.: *Integrated Digital Education – Computational Thinking for Everyone*. Doctoral Consortium International Conference on Informatics in Schools (ISSEP), 2022.
- [15] Kuka, L., Hörmann, C., Sabitzer, B.: *Teaching and Learning with AI in Higher Education: A Systematic Review*. Section 5: Machine Learning and Human Learning, Book Project: Learning with Technologies and Technologies in Learning, 2022, https://link.springer.com/chapter/10.1007/978-3-031-04286-7_26.
- [16] Hörmann, C., Hinterplattner, S., Sabitzer, B.: *SARS-COVID-19 – Eine Chance für die Bildungslandschaft? Untersuchung zur Umsetzung der “Digitalen Grundbildung”*

während des Lockdowns. Medienimpulse, 2021, <https://journals.univie.ac.at/index.php/mp/article/view/6298>.

- [17] Sabitzer, B., Groher, I., Hörmann, C., Hofer, A.: *Toward the Implementation of Escape Room Games in an Educational Context*. 15th European Conference on Games Based Learning (ECGBL), Brighton, UK, 2021.
- [18] Hörmann, C., Rottenhofer, M., Groher, I., Sabitzer, B.: *Let the Games Begin – Inviting Young Learners to Code*. 26th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE), Paderborn, Germany, 2021, <https://dl.acm.org/doi/abs/10.1145/3456565.3460074>.
- [19] Hörmann, C., Kuka, L., Sabitzer, B.: *Digital Literacy in Austrian Lower Secondary Education – A Synthesis and Evaluation of Experiences in the First Two Years*. International STEM Education Conference (iSTEMed), online, 2021, <https://ieeexplore.ieee.org/document/9625126>.
- [20] Rottenhofer, M., Hörmann, C., Sabitzer, B.: *Lasst die Spiele beginnen! Mit dem Projekt COOL Informatics spielerisch Computational Thinking Skills fördern*. In: OCG Journal. Ausgabe 01-02, 2021, <https://tinyurl.com/46up2fmj>.
- [21] Hörmann, C., Sabitzer, B.: *Digital Literacy in Lower Secondary Education – A First Evaluation of the Situation in Austria*. International Conference on Informatics in Schools (ISSEP), online, 2020, <https://ceur-ws.org/Vol-2755/paper12.pdf>.
- [22] Otto, K., Kröhn, C., Sabitzer, B.: *Immersion into the World of Gaming – an Approach of Introducing Gamification in an Educational Context*. International Conference on Computer Supported Education (CSEDU), 2020.
- [23] Kröhn, C., Sabitzer, B.: *Peer-Learning And Talents Exchange In Programming – Experiences And Challenges*. International Conference on Computer Supported Education (CSEDU), 2020, <https://tinyurl.com/y45bs2ph>.
- [24] Kröhn, C., Hinterplattner, S., Sabitzer, B.: *Towards an Implementation of a Peer-Learning and Peer-Teaching Group in Programming*. Conference on Innovation and Technology in Computer Science Education (ITiCSE), 2020, <https://dl.acm.org/doi/10.1145/3341525.3393971>.

- [25] Kröhn, C., Skogø, J., Hinterplattner, S., Sabitzer, B.: *Towards Implementing Computational Thinking in Mathematics Education in Austria*. Conference on Mathematics Education in the Digital Age (MEDA), 2020, <https://tinyurl.com/yusp2wb3>.
- [26] Hinterplattner, S., Skogø, J., Kröhn, C., Sabitzer, B.: *The Children's Congress: A Benefit To All Levels Of Schooling By Strengthening Computational Thinking*. International Journal of Learning and Teaching, Vol. 6, Nr. 1, 2020, <http://www.ijlt.org/index.php?m=content&c=index&a=show&catid=149&id=798>.
- [27] Kröhn, C., Groher, I., Sabitzer, B., Kuka, L.: *Female Computer Scientists Needed – Approaches for Closing The Gender Gap*. Frontiers in Education (FiE), IEEE, 2020, <https://ieeexplore.ieee.org/document/9273933>.
- [28] Kröhn, C., Sabitzer B.: *Integrated Digital Education – Computational Thinking for Everyone*. International Conference on Informatics in Schools (ISSEP), Larnaca, Cyprus, 2019, <https://tinyurl.com/mr29wm6k>.
- [29] Hofstätter, B., Sabitzer, B., Thaler, A., Kröhn, C.: *Kids4Wearables: Sustainability and Creativity in STEM Education*. 12th Annual International Conference of Education, Research and Innovation (ICERI), Seville, Spain, 2019, <https://library.iated.org/view/HOFSTATTER2019KID>.
- [30] Sabitzer, B., Spieß-Knafl, S., Pasterk, S., Kröhn, C.: *Entdecken Sie Java! Programmieren lernen und üben mit Musterlösungen*. Amazon, 2019, <https://amzn.eu/d/gZZic8m>.
- [31] Reisinger, M., Kröhn, C., Sabitzer, B.: *Magic Arts as Problem-Based Learning Concept – A STEAM Approach to Introduce Computational Thinking in Lower Secondary Schools*. International Technology, Education and Development Conference (INTED), 2018, <https://library.iated.org/view/REISINGER2019MAG>.

Talks

- [1] *From G for Grooming to S for Sexting – Cyber Security in Everyday School Life: Teachers as Shields Against Online Threats?* Lecture Series Diversity, Gender & Intersectionality, University Passau, Germany. 22/11/2023.
- [2] *Navigating the Implementation of the Curriculum Digital Education in Austrian Secondary Schools: Challenges and Teacher Perspectives.* International Conference on Informatics in Schools (ISSEP), Lausanne, Switzerland. 23/10/2023.
- [3] *Quo vadis Digitale Grundbildung.* Ditact Summer School, Salzburg, Austria. 31/08/2023.
- [4] *Introducing Digital Education as a Mandatory Subject.* 15th International Conference on Computer Supported Education (CSEDU), Prague, Czech Republic. 22/04/2023.
- [5] *Let IT Dance! – Informatik mit Tanz und Musik.* eEducation Praxistage, Linz, Austria. 21/03/2023.
- [6] *From Non-Existent to Mandatory in Five Years – The Journey of Digital Education in the Austrian School System.* International Conference on Informatics in Schools, Vienna, Austria, 28/9/2022.
- [7] *Let the Games Begin – Inviting Young Learners to Code.* 26th Annual Conference on Innovation and Technology in Computer Science Education (ITiCSE), 30/06/2021, online.
- [8] *Digital Literacy in Austrian Lower Secondary Education – Evaluation of Experiences in the First Two Years.* Methodological Innovations in STEAM Education Conference, 18/03/2021, Linz, Austria.
- [9] *Digital Literacy in Lower Secondary Education – A First Evaluation of the Situation in Austria.* International Conference on Informatics in Schools (ISSEP), 17/11/2020, online.
- [10] *Female Computer Scientists Needed – Approaches For Closing The Gender Gap.* Frontiers in Education conference (FiE), 24/10/2020, online.
- [11] *Peer Learning mit Hilfe des COOL Konzeptes – eine Möglichkeit zur Senkung der Drop-Out Quote im Studium der Informatik.* Tag der Lehre FH OÖ, 18/05/2020, online.

- [12] *Digital Literacy in Lower Secondary Schools – A First Evaluation of the Situation in Austria.* Linz STEAM Conference, 13/05/2020, Linz, Austria.
- [13] *Peer-Learning and Talents Exchange In Programming – Experiences And Challenges.* Conference on Computer Supported Learning (CSEDU), 04/05/2020, online.
- [14] *Computational Thinking for Everyone.* Innovations in STEAM Education and Design Research Conference, 09/05/2019, Linz, Austria.
- [15] *Digitale Grundbildung integrativ – Computational Thinking in allen Fächern.* Inday teachers, 22/05/2019, Innsbruck, Austria.
- [16] *Digitale Grundbildung integrativ: Computational Thinking in allen Fächern.* OeAD macht Schule: Was Lehrkräfte bei der (Weiter-)Entwicklung von digitalen Kompetenzen unterstützt, 30/04/2019, Vienna, Austria.
- [17] *COOL Lab: a Cross-Curricular Learning Lab.* Gamification and Creativity in STEAM Education conference, 17/01/2019, Linz, Austria.

Projects

- [1] *DigiFit4All*. Digital and computer science skills through personalized courses (POOCs), 2020 - present.
- [2] *Let IT Dance*. Computer Science with music and dancing, 2022 - 2023.
- [3] *Girls* Only*. STEM support measures with a focus on computer science and computational thinking for girls and young women, 2021 - 2022.
- [4] *COOL Informatics*. Cross-curricular materials for digital literacy and programming, 2019 - 2020.
- [5] *Modeling at School*. Computer Science modeling as a creative teaching & learning strategy across all school levels and subjects, 2018 - 2021.

Reviews

- [1] Qeios, 02/2024, <https://www.qeios.com/read/Q3MZY9>.
- [2] Austrian Citizen Science Conference, 11/2023, <https://www.citizen-science.at/konferenz/oecsk-2023>.
- [3] ÖZBF Tagungsband, 2022, <https://osf.io/vp629/>.

Further Involvements

- [1] *Workgroup Curriculum “Informatik” AHS*. Development of the curriculum for grade 9 (AHS) for the BMBWF, 2022 - 2023.
- [2] *Workgroup Curriculum “Informatik und Digitale Grundbildung”*. Development of the curriculum for the study “Informatik und digitale Grundbildung” at Johannes Kepler University Linz and Paris Lodron University Salzburg, 2022 - present.
- [3] *Ditact - Women’s IT Studies*. Computer science and IT-centered courses by women for women in Austria, 2022 - present, <https://ditact.ac.at/>.
- [4] *CreaMoS*. Association for the promotion of digital education and health, 2022 - present, <https://www.creamos.eu/>.
- [5] *Mini MINTs*. STEM workshops for kindergarten children at the local parent-child center, 2022 - present.
- [6] *Ars Electronica Festival*. Festival for art, technology & science, 2021, <https://ars.electronica.art/festival/>.
- [7] *Tagebuch der Informatikerin*. Mentoring for female students, 2020 - 2021.
- [8] *Kinderuni OÖ*. Extracurricular educational program for children and teenagers in summer, 2019 - present, <https://www.kinderuni-ooe.at/>.
- [9] *RECC OÖ group of “Informatik & Digitale Medien”*. Developing digital literacy among students, teachers, pre-service teachers, and teacher trainers, 2019 - present, <https://neu.recc-ooe.at/>.
- [10] *Lange Nacht der Forschung*. Diverse program with offerings from a wide range of scientific disciplines for the public, 2019 - present, <https://langenachtderforschung.at/>.
- [11] *Teacher Training*. Various teacher training workshops at PH OÖ concerning “Digital Education”, “Digital Teacher Tools”, “Moodle”, “Distance Learning”, etc, 2018 - present.
- [12] *Kinderkongress*. Event to strengthen Computational Thinking and to increase interest in STEAM subjects, 2018 - 2020.

- [13] *FIT - Frauen in die Technik*. Information about all technical and scientific studies at JKU for female students, 2008 - 2011,
<https://tinyurl.com/2umbu4bs>.