

# Tim Hagen Fütterer

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[Web](#) | [Google Scholar](#) | [Researchgate](#) | [OSF](#) | [LinkedIn](#)

## PERSONAL DATA

|                        |                        |
|------------------------|------------------------|
| Date / -Place of birth | 11/28/1985, Neumünster |
| Nationality            | German                 |

## PROFESSIONAL APPOINTMENTS

|                   |                                                                                                                                                                                    |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2018 - present    | <b>Postdoctoral Scholar</b><br>University of Tübingen,<br>Hector Research Institute of Education Sciences and Psychology<br>Mentor: Prof. Kathleen Stürmer, Prof. Ulrich Trautwein |
| 12/2012 – 03/2018 | <b>Research Assistant</b> with a Doctorate in Education Science<br>Kiel University<br>Institute for Pedagogy                                                                       |
| 04/2012 – 03/2018 | <b>Research Assistant</b> with Predominant Teaching Part in Education Science<br>Kiel University<br>Institute for Pedagogy                                                         |

## ACADEMIC EDUCATION

|                   |                                                                                                                                                                                                                                                                                        |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 04/2023           | <b><u>University of Oslo, Norway</u></b><br>Lab Visit at the Centre for Educational Measurement at University of Oslo (CEMO)                                                                                                                                                           |
| 01/2022 – 05/2022 | Visiting Student Researcher at the Centre for Educational Measurement at University of Oslo (CEMO)<br>Mentor: Prof. Ronny Scherer, Prof. Sigrid Blömeke                                                                                                                                |
| 01/2018 – 03/2018 | <b><u>Stanford University, CA, United States of America</u></b><br>Visiting Student Researcher at the Graduate School of Education<br>Mentor: Prof. Maria Ruiz-Primo                                                                                                                   |
| 11/2017           | <b><u>Kiel University, Germany</u></b><br><b>Ph.D. Doctor of Philosophy in Educational Studies</b><br>Program Area: Professional Development of Teachers<br>Concentration: Professional Development Portfolios in Preparatory Service [summa cum laude]<br>Mentor: Prof. Birgit Brouër |

Reviewer: Prof. Birgit Brouër, Prof. Nicole Welter, Prof. Michaela Gläser-Zikuda

2006 - 2012

**Erste Staatsprüfung für das Lehramt an Gymnasien und Gesamtschulen**  
Teaching certificate for teaching in German college track secondary schools  
[Equivalent to Bachelor and Master]  
Subjects: Mathematics, Economics and Politics

## PUBLICATIONS AND PRESENTATIONS

### Manuscripts Submitted for Publication

- Jaggy\*, A.-K., Jansen\*, T., **Fütterer, T.**, & Trautwein, U. (2025). *Almighty ChatGPT? – Development of gifted secondary school students' AI (mis)conception. Manuscript submitted for publication (under review).*
- Wekerle, C., Sailer, M., Kollar, I. & **Fütterer, T.** (2025). The effects of ICAP learning activities on learning outcomes. *Manuscript submitted for publication (under review).*
- Holz, H., Beuttler, B., **Fütterer, T.**, Seibold, M., Küplüce, C., Sadaf, A., & Leifheit, L. (2025). Development and validation of a German version of the intelligent-TPACK: the German intelligent-TPACK. *Manuscript submitted for publication (under review).*
- Gazar, F., **Fütterer, T.**, Franke, U., Stürmer, K., Santagata, R., & Lachner, A. (2025). Embedding instructional support in video annotation tools enhances pre-service teachers' professional vision. *Manuscript submitted for publication (revise and resubmit).*
- Morina, F., **Fütterer, T.**, Carpenter, J., Rosenberg J. M., & Fischer, C (2025). Unlocking the potential of educational resources: An examination of sharing and usage patterns in educational online communities. *Manuscript submitted for publication (revise and resubmit).*
- Fütterer, T.**, Bardach, L., Kuhn, J., Keller, S. D., & Gerjets, P. (2025). Enhancing school students' self-regulated learning through generative AI support: A randomized controlled trial. *Manuscript submitted for publication (revise and resubmit).*
- Flegr, S., Fabian, A., & **Fütterer, T.** (2025). The impact of students' individual differences on their learning success with virtual experiments in science education: A systematic review and meta-analysis. *Manuscript submitted for publication (revise and resubmit).*
- Fütterer\*, T.**, König\*, L., Campos, D. G., Zitzmann, S., Hecht, M., & Scherer, R. (2025). Fast-track your abstract screening: Mastering ASReview for accelerating abstract screening and evaluating decisions from automatic screening methods. *Manuscript submitted for publication (revise and resubmit).*
- Fütterer, T.**, Scheiter, K., Lachner, A., Hübner, N., & Stürmer, K. (2025). How to promote high-quality technology-enhanced teaching? A randomized trial on integrative versus transformative online professional development. *Manuscript submitted for publication (under review).*
- Fütterer, T.**, Hoch, E., & Dumont, H. (2025). Uncovering the relationship of technology-enhanced, adaptive teaching and situational interest in mathematics in a randomized controlled trial. *Manuscript submitted for publication (revise and resubmit).*
- Scherer, R., Campos, D., **Fütterer, T.**, & Siddiq F. (2025). Unraveling gender disparities in teachers' technological pedagogical and content knowledge: A large-scale meta-analysis. *Manuscript submitted for publication (revise and resubmit).*
- Schiefer, J., Wagner, W., **Fütterer, T.** (2024). Does the teacher make a difference? The relevance of teachers' characteristics in an extracurricular science enrichment program. *Manuscript submitted for publication (under review).*
- Jung\*, A., **Fütterer\*, T.**, Nagengast, B., Frenzel, A., Göllner, R., Jaekel, A., & Murayama, K. (2024). Who inspires whom? Reciprocal relationships between teacher enthusiasm and students' interest and enjoyment. *Manuscript submitted for publication (under review).*
- Brück-Hübner, A., **Fütterer, T.**, & Keller, S. D. (2025). Portfolios in teacher education: Bridging assessment and learning through feedback. *Manuscript submitted for publication (revise and resubmit).*
- Tan, T. C. A., **Fütterer, T.**, Nilsen, T., & Zitzmann, S. (2024). An imputation approach to estimating grade inflation. *Manuscript submitted for publication (revise and resubmit).*
- Bareis, A., **Fütterer, T.**, Spengler, M., Trautwein, U., Nagengast, B., Krammer, G., Boxhofer, E., Nausner, E., Pflanzl, B., & Mayr, J. (2024). Interest is a stronger predictor than conscientiousness for teachers' intensity in engaging in professional development. *Manuscript submitted for publication (under review).*
- Bauer, N, **Fütterer, T.**, Brucker, B., & Gerjets, P. (2024). Enhancing academic writing skills: The role of ChatGPT for student performance and perceived ownership in in-class exercises. *Manuscript submitted for publication (revise and resubmit).*

## Journal Articles With Peer-Review

- Fütterer, T.**, Campos, D. G., Gfrörer, T., Lavelle-Hill, R., Murayama, K., & Scherer, R. (2026). AI tools for systematic literature reviews and meta-analyses in educational psychology: An overview and a practical guide. *Learning and Individual Differences*
- Fütterer, T.**, Pardi, G., Ziegs, T., Flegr, S., Ring, M., Fabian, A., Pawlak, F., Steinmetz, T., Becker, S., Bertram, C., Schreiber, W., Meurers, D., Brahm, T., Führer, C., Kuhn, J., Schwarzer, S., Paravicini, W., Burde, J.-P., Nuxoll, F., Fürstenberg, M., Matz, D., Krey, K., Hochstetter, G., Brucker, B., & Gerjets, P. (2026). Zwischen Praxisrelevanz und technologischer Dynamik: Forschungsmethodische Perspektiven auf GenAI im Unterricht am Beispiel niveaudifferenzierter Lernaufgaben [Between practical relevance and technological dynamism: Methodological perspectives on GenAI in teaching illustrated by level-differentiated learning tasks]. *Zeitschrift für Erziehungswissenschaft*
- Fütterer, T.**, Hou, R., Bühler, B., Bozkir, E., Bell, C., Kasneci, E., Gerjets, P., & Trautwein, U. (2026). Validating automated assessments of teaching effectiveness using multimodal data. *Learning and Instruction*, 101, 102264. <https://doi.org/10.1016/j.learninstruc.2025.102264>
- Fütterer, T.**, Goldberg, P., Bühler, B., Sikimić, V., Trautwein, U., Gerjets, P., Stürmer, K., & Kasneci, E. (2025). Artificial intelligence in classroom management: A systematic review on educational purposes, technical implementations, and ethical considerations. *Computers and Education: Artificial Intelligence*, 100483. <https://doi.org/10.1016/j.caeai.2025.100483>
- Jaggy, A.-K., Wagner, W., **Fütterer, T.**, Göllner, R., & Trautwein, U. (2025). Teaching quality in STEM education: Differences between in- and out-of-school contexts from the perspective of gifted students. *International Journal of STEM Education*, 12(1), 53. <https://doi.org/10.1186/s40594-025-00576-w>
- Bühler\*, B., **Fütterer\***, T., Von Keyserlingk, L., Bozkir, E., Kasneci, E., Gerjets, P., & Trautwein, U. (2025). Mapping mind wandering to the "Self-Regulated Learning Process, Multimodal Data, and Analysis Grid": A systematic review. *Educational Psychology Review*, 37(3), 76. <https://doi.org/10.1007/s10648-025-10041-3>
- Fütterer, T.**, Wurst, C., & Goeze, A. (2025). Rethinking professional development: Development and evaluation of an evidence-based online PD course on the effective use of technology in the classroom. *Education Sciences*, 15(2), 205. <https://doi.org/10.3390/educsci15020205>
- Morina, F., **Fütterer, T.**, Hübner, N., Zitzmann, S., & Fischer, C. (2025). Effects of online teacher professional development on teacher, classroom, and student level outcomes: A meta-analysis. *Computers & Education*, 105247. <https://doi.org/10.1016/j.compedu.2025.105247>
- König, L., Zitzmann, S., **Fütterer, T.**, Campos, D. G., Scherer, R., & Hecht, M. (2024). An evaluation of the performance of stopping rules in AI -aided screening for psychological meta-analytical research. *Research Synthesis Methods*, jrsm.1762. <https://doi.org/10.1002/jrsm.1762>
- Tschönnens, F., Backfisch, I., **Fütterer, T.**, & Lachner, A. (2024). TPACK in Action: Contextual effects of pre-service and in-service teachers' knowledge structures for technology integration. *Computers and Education Open*, 100219. <https://doi.org/10.1016/j.caeo.2024.100219>
- Bardach, L., Bostwick, K. C. P., **Fütterer, T.**, Kopatz, M., Hobbi, D. M., Klassen, R. M., & Pietschnig, J. (2024). A meta-analysis on teachers' growth mindset. *Educational Psychology Review*, 36(3), 84. <https://doi.org/10.1007/s10648-024-09925-7>
- Fütterer, T.**, Hübner, N., Fischer, C., & Stürmer, K. (2024). Heading for new shores? Longitudinal participation patterns in teacher professional development. *European Journal of Teacher Education*. <https://doi.org/10.1080/02619768.2024.2370891>
- Fütterer, T.**, Backfisch, I., & Lachner, A. (2024). Teachers' trajectories of technology integration during participating in an online professional development. *Zeitschrift für Erziehungswissenschaft*. <https://doi.org/10.1007/s11618-024-01251-6>
- Fütterer, T.**, Omarchevska, Y., Rosenberg, J. M., & Fischer, C. (2024). How do teachers collaborate in informal professional learning activities? An epistemic network analysis. *Journal of Science Education and Technology*. <https://doi.org/10.1007/s10956-024-10122-y>
- Stürmer, K., **Fütterer, T.**, Kron, S., Sommerhoff, D., & Ufer, S. (2024). What makes a simulation-based learning environment for pre-service teachers authentic? The role of individual learning characteristics and context-related features. *European Journal of Psychology of Education*. <https://doi.org/10.1007/s10212-024-00837-2>

- Fütterer, T., Richter, E., & Richter, D.** (2024). Teachers' engagement in online professional development—The interplay of online professional development quality and teacher motivation. *Zeitschrift für Erziehungswissenschaft*. <https://doi.org/10.1007/s11618-024-01241-8>
- Richter, E., **Fütterer, T.**, Eisenkraft, A., & Fischer, C. (2024). Profiling teachers' motivation for professional development—A nationwide study. *Journal of Teacher Education*. <https://doi.org/10.1177/00224871241247777>
- Fabian, A., **Fütterer, T.**, Backfisch, I., Lunowa, E., Paravicini, W., Hübner, N., & Lachner, A. (2024). Unraveling TPACK: Investigating the inherent structure of TPACK from a subject-specific angle using test-based instruments. *Computers & Education*, 105040. <https://doi.org/10.1016/j.compedu.2024.105040>
- Campos, D. G., **Fütterer, T.**, Gfrörer, T., Lavelle-Hill, R., Murayama, K., König, L., Hecht, M., Zitzmann, S., & Scherer, R. (2024). Screening smarter, not harder: A comparative analysis of machine learning screening algorithms and heuristic stopping criteria for systematic reviews in educational research. *Educational Psychology Review*, 36(1), 19. <https://doi.org/10.1007/s10648-024-09862-5>
- Fütterer, T.**, Steinhäuser, R., Zitzmann, S., Scheiter, K., Lachner, A., & Stürmer, K. (2023). Development and validation of a test to assess teachers' knowledge about how to operate technology. *Computers and Education Open*, 100152. <https://doi.org/10.1016/j.caeo.2023.100152>
- Fütterer, T.**, Fischer, C., Alekseeva, A., Chen, X., Tate, T., Warschauer, M., & Gerjets, P. (2023). ChatGPT in education: Global reactions to AI innovations. *Scientific Reports*, 13(1), 15310. <https://doi.org/10.1038/s41598-023-42227-6>
- Jaekel, A.-K., **Fütterer, T.**, & Göllner, R. (2023). Teaching characteristics in distance education—Associations with teaching quality and students' learning experiences. *Teaching and Teacher Education*, 132, 104174. <https://doi.org/10.1016/j.tate.2023.104174>
- Fütterer\*, T.**, Hoch\*, E., Lachner, A., Scheiter, K., & Stürmer, K. (2023). High-quality digital distance teaching during COVID-19 school closures: Does familiarity with technology matter? *Computers & Education*, 199, 104788. <https://doi.org/10.1016/j.compedu.2023.104788>
- Fütterer, T.**, Scherer, R., Scheiter, K., Stürmer, K., & Lachner, A. (2023). Will, skills or conscientiousness: What predicts teachers' intention to participate in technology-related professional development? *Computers and Education*, 198, 104756. <https://doi.org/10.1016/j.compedu.2023.104756>
- Fütterer, T.**, van Waveren, L., Hübner, N., Fischer, C., & Sälzer, C. (2023). I can't get no (job) satisfaction? Differences in teachers' job satisfaction from a career pathways perspective. *Teaching and Teacher Education*, 121, 103942. <https://doi.org/10.1016/j.tate.2022.103942>
- Fütterer, T.**, Feder, L., & Cramer, C. (2022). Ein neues Instrument zur Erfassung von Einstellungen zu Portfolioarbeit in der Lehrerinnen- und Lehrerbildung (EPP-L) [A new questionnaire to assess attitudes towards portfolio work in teacher education (EPP-L)]. *Unterrichtswissenschaft*. <https://doi.org/10.1007/s42010-022-00161-y>
- Richter, E., **Fütterer, T.**, Meier, A., Eisenkraft, A., & Fischer, C. (2022). Teacher collaboration and professional learning. Examining professional development during a national education reform. *Zeitschrift Für Pädagogik*, 6, 798–819. <https://doi.org/10.3262/ZP2206798>
- Fütterer, T.**, Scheiter, K., Cheng, X., & Stürmer, K. (2022). Quality beats frequency? Investigating students' effort in learning when introducing technology in classrooms. *Contemporary Educational Psychology*, 69, 102042. <https://doi.org/10.1016/j.cedpsych.2022.102042>
- Aguilar, S. J., Rosenberg, J. M., Greenhalgh, S. P., **Fütterer, T.**, Lishinski, A., & Fischer, C. (2021). A different experience in a different moment? Teachers' social media use before and during the COVID-19 pandemic. *AERA Open*, 7(1), 17. <https://doi.org/10.1177/23328584211063898>
- Fütterer, T.**, Hoch, E., Stürmer, K., Lachner, A., Fischer, C., & Scheiter, K. (2021). Was bewegt Lehrpersonen während der Schulschließungen?—Eine Analyse der Kommunikation im Twitter-Lehrerzimmer über Chancen und Herausforderungen digitalen Unterrichts [Concerns of teachers during school closings: analyzing communication in the Twitter-Lehrerzimmer regarding opportunities and challenges of digital teaching]. *Zeitschrift für Erziehungswissenschaft*. 24, 443-477. <https://doi.org/10.1007/s11618-021-01013-8>

\* shared first authorship

### Conference Proceedings

- Ren, S., Nguyen, H., Stürmer, K., Hopp, M., Göllner, K., & **Fütterer, T.** (2026). *Evaluating large language model feedback to support teacher professional vision: Prompting strategies and pre-service teacher engagement*. The 16th International Learning Analytics & Knowledge Conference

- Bueno\*, I., Hou\*, R., Bühler, B., **Fütterer, T.**, Drimalla, J., Foster, J.K., Youngs, P., Gerjets, P., Trautwein, U., & Kasneci, E. (2026). *Exploring automated recognition of instructional activity and discourse from multimodal classroom data*. Winter Conference on Applications of Computer Vision 2026. *arXiv preprint arXiv:2512.00087*. <https://doi.org/10.48550/arXiv.2512.00087>
- Hou, R., **Fütterer, T.**, Bühler, B., Schreyer, P., Gerjets, P., Trautwein, U., & Kasneci, E. (2025). LLM-human alignment in evaluating teacher questioning practices: Beyond ratings to explanation. In J. Wilson, National Council on Measurement in Education, Association for Computational Linguistics, & National Council on Measurement in Education (Eds.), *Artificial Intelligence in Measurement and Education Conference (AIME-Con): Volume 1 ; full papers: AIME-Con 2025: October 27-29, 2025* (pp. 239–249). Artificial Intelligence in Measurement and Education Conference, Bloomington, IN. National Council on Measurement in Education (NCME). <https://aclanthology.org/2025.aimecon-main.26/>
- Hou, R., Bühler, B., **Fütterer, T.**, Bozkir, E., Gerjets, P., Trautwein, U., & Kasneci, E. (2025). *Multimodal assessment of classroom discourse quality: A text-centered attention-based multi-task learning approach*. The 18th International Conference on Educational Data Mining (EDM 2025). *arXiv preprint arXiv:2505.07902*. <https://doi.org/10.48550/arXiv.2505.07902>
- Hou, R., **Fütterer, T.**, Bühler, B., Bozkir, E., Gerjets, P., Trautwein, U., & Kasneci, E. (2024). Automated assessment of encouragement and warmth in classrooms leveraging multimodal emotional features and ChatGPT. In A. M. Olney, I.-A. Chounta, Z. Liu, O. C. Santos, & I. I. Bittencourt (Eds.), *Artificial Intelligence in Education* (Vol. 14829, pp. 60–74). Springer Nature Switzerland. [https://doi.org/10.1007/978-3-031-64302-6\\_5](https://doi.org/10.1007/978-3-031-64302-6_5)

## Books

- Fütterer, T.** (2019). *Professional Development Portfolios im Vorbereitungsdienst. Die Wirksamkeit von Lernumgebungen auf die Qualität der Portfolioarbeit [Professional development portfolios in preparatory service. The effectiveness of learning environments on the quality of portfolio work]*. Wiesbaden: Springer. <https://doi.org/10.1007/978-3-658-24064-6>

## Book Chapters With Peer-Review

- Scheiter, K., Lazarides, R., & **Fütterer, T.** (2025). Lehrkräftebildung und Schulentwicklung im Kontext des digitalen Wandels [Teacher education and school development in the context of digital transformation]. *Manuscript submitted for publication* (under review).
- Trautwein, U., **Fütterer, T.**, Dumont, H., Sliwka, A., & Roth, M. (2025). E-ADAPT: Große Fragen erfordern gemeinsame Antworten – eine europäische Wissenschafts-Praxis- Initiative für adaptiven Unterricht [E-ADAPT: Big questions need common answers - a European science-practice initiative for adaptive teaching]. In F. Locher, V. Unger, J. Hochweber, & C. Brühwiler (Eds.), *Studienbuch Empirische Bildungsforschung: Grundlagen und Relevanz für Ausbildung und Schule [Study book empirical educational research: Fundamentals and relevance for training and school]* (pp. 123–133). utb GmbH. <https://doi.org/10.36198/9783838564937>
- Rehm, M., **Fütterer, T.**, Fischer, C., Lockton, M., Caduff, A., & Daly, A. J. (2025). The role of knowledge brokers in supporting social opportunity spaces. In N. Kolleck (Ed.), *Handbook of social network analysis and education* (pp. 420–437). Edward Elgar Publishing.
- Goldberg, P., & **Fütterer, T.** (2024). Extended reality as a tool in research on teachers' professional vision. In A. Gegenfurtner & R. Stahnke, *Teacher Professional Vision: Theoretical and Methodological Advances* (1st ed., pp. 124–139). Routledge. <https://doi.org/10.4324/9781003370901-12>
- Fütterer, T.**, Stürmer, K., & Göllner, R. (2024). Assessing teachers' noticing from written reflections. In M. Blikstad-Balas & I. Staal Jensen (Eds.), *Improving teaching practices: How can we use videos to foster professional learning and classroom change?* Routledge. <https://doi.org/10.4324/9781003427414-12>
- Hoch, E., & **Fütterer, T.** (2023). Kompetenzen für das Lernen mit digitalen Medien: Eine konzeptuelle Analyse [Competencies for learning with digital media: A conceptual analysis]. In K. Scheiter & I. Gogolin (Eds.), *Bildung für eine digitale Zukunft [Education for a digital future]* (Vol. 15). Springer VS. [https://doi.org/10.1007/978-3-658-37895-0\\_4](https://doi.org/10.1007/978-3-658-37895-0_4)
- Stürmer, K., **Fütterer, T.**, Lachner, A., Hoch, E., & Scheiter, K. (2021). Besser als gedacht? Individuelle Voraussetzungen von Schülerinnen und Schülern sowie Lehrpersonen zum Lehren und Lernen mit digitalen Medien im Unterricht im tabletBW-Projekt [Better than thought? Individual prerequisites of students and teachers for teaching and learning with digital media in the tabletBW project]. In Beck, N., Bohl, T., & Meissner, S. (Eds.), *Vielfältig herausgefordert. Forschungs- und Entwicklungsfelder der*

- Lehrerbildung auf dem Prüfstand [Diversely challenged. Research and development fields of teacher education put to the test]* (pp. 87-100). University Press: Tübingen.  
<https://doi.org/10.15496/publikation-52634>
- Feder, L., **Fütterer, T.**, & Cramer, C. (2021). Einstellungen Studierender zur Portfolioarbeit. Theoriebasierte Erfassung und erste deskriptive Befunde [Students' attitudes towards portfolio work. Theory-based assessment and first descriptive findings]. In Beck, N., Bohl, T., & Meissner, S. (Eds.), *Vielfältig herausgefordert. Forschungs- und Entwicklungsfelder der Lehrerbildung auf dem Prüfstand [Diversely challenged. Research and development fields of teacher education put to the test]* (pp. 209-221). University Press: Tübingen. <https://doi.org/10.15496/publikation-52627>
- Brouër, B., **Fütterer, T.**, & Kunze, L. M. (2019). Empirische Bildungsforschung als interdisziplinäre Teildisziplin der Pädagogik [Empirical educational science as an interdisciplinary subdiscipline of pedagogy]. In M. F. Buck & M. Böge (Eds.), *Pädagogik als Disziplin und Profession – Historische Perspektiven auf die Zukunft [Pedagogy as discipline and profession - Historical perspectives on the future]* (pp. 189–216). Peter Lang.

### Book Chapters Without Peer-Review

- Wurst, C., **Fütterer, T.**, & Goeze, A. (2024). Digitale Medien im Fachunterricht: Innovative Konzeption einer forschungsbasierten Onlinefortbildung zum lernwirksamen Einsatz digitaler Medien in der pädagogischen Praxis [Digital media in teaching: Innovative design of a research-based online professional development course on the effective use of digital media in educational practice]. In M. Jungwirth, J. Haarmann, N. Harsch, F. Haupts, J. Marks, Y. Noltensmeier (Hrsg.): *Wegmarken für eine zeitgemäße Lehrkräftebildung – Konzeptionelle Ansätze im Fokus [Milestones for contemporary teacher training - focus on conceptual approaches]*. Tagungsband des 16. Bundeskongresses der Zentren für Lehrer\*innenbildung. Münster: WTM.
- Brouër, B. & **Fütterer, T.** (2015). Zeit ist Bildung? Zeit als notwendiger und hinreichender Faktor selbstregulativer Prozesse am Beispiel des Portfolioeinsatzes in der zweiten Phase der LehrerInnenbildung [Time is education? Time as a necessary and sufficient factor of self-regulatory processes using the example of portfolio use in the second phase of teacher education]. In A. Rausch, J. Warwas, J. Seifried & E. Wutke (Eds.), *Konzepte und Ergebnisse ausgewählter Forschungsfelder der beruflichen Bildung – Festschrift für Detlef Sembill [Concepts and results of selected fields of research in vocational education - Commemorative publication for Detlef Sembill]* (pp. 361-381). Schneider Verlag Hohengehren.

### Publications for Practitioners and the Public

- Fütterer, T.** (2025). Lernen mit Künstlicher Intelligenz: "Es wird die sofortige Antwort erwartet" [Learning with artificial intelligence: "An immediate response is expected"]. *campus schulmanagement*.  
<https://www.campus-schulmanagement.de/magazin/lernen-mit-kuenstlicher-intelligenz-es-wird-die-sofortige-antwort-erwartet-tim-fuetterer>
- Fütterer, T.**, Udvardi-Lakos, N., & Fabian, A. (2025). Was macht gute Online-Fortbildungen für Lehrkräfte aus? [What makes good online training courses for teachers?]. *campus schulmanagement*.  
<https://www.campus-schulmanagement.de/magazin/was-macht-gute-online-fortbildungen-fuer-lehrkraefte-aus-tim-fuetterer-nina-udvardi-lakos-armin-fabian>
- Fütterer, T.**, Gerjets, P., Cress, U., Lachner, A., Meurers, D., Köller, O., Fischer, F., Scheiter, K., Müller-Eiselt, R., Nuxoll, F., Bronner, P., Blume, B., & Trautwein, U. (2024). Wir sollten uns nicht durch die Stellungnahme des Karolinska-Instituts beirren lassen [We should not be misled by the Karolinska Institute's statement]. *campus schulmanagement*. <https://www.campus-schulmanagement.de/magazin/gegendarstellung-karolinska-studie>
- Collaboration on Ständige Wissenschaftliche Kommission der Kultusministerkonferenz (SWK; 2024): Large Language Models und ihre Potenziale im Bildungssystem [Large language models and their potential in the education system]. *Impulspapier der Ständigen Wissenschaftlichen Kommission (SWK) der Kultusministerkonferenz*. <http://dx.doi.org/10.25656/01:28303>
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- Fütterer, T.** & Meisel, A. (2016). Eine Pilotstudie zur Akzeptanz des Einsatzes eines Berufswahl- und Bewerbungsportfolios [A pilot study on the acceptance of the use of a career choice and application portfolio]. *TALENTE*, 12(26), 20-39.
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## Conference Presentations

- Fabian, A., Udvardi-Lakos, N., & **Fütterer, T.** (2025, November). *Auf dem Weg zu adaptiven Onlinefortbildungen: Einsichten in das Projekt ALIFE [On the way to adaptive online professional development: Insights into the ALIFE project]*. Paper at the conference "Wie viel Wissenschaft braucht die Lehrpersonenfortbildung?" Pädagogische Hochschule St. Gallen, Switzerland
- Udvardi-Lakos, N., Fabian, A., Zhang, S. Z., Berens, F., Murayama, K., & **Fütterer, T.** (2025, November). *Können Spiel-Design-Elemente die Entwicklung intrinsischer Motivation von Lehrkräften zur Teilnahme an Onlinefortbildungen fördern? [Can game design elements promote the development of intrinsic motivation of teachers to participate in online training?]*. Paper at the conference "Wie viel Wissenschaft braucht die Lehrpersonenfortbildung?" Pädagogische Hochschule St. Gallen, Switzerland
- Udvardi-Lakos, N., Fabian, A., Morina, F., Trautwein, U., & **Fütterer, T.** (2025, August). *Development and design of effective adaptive online professional development courses for teachers*. Roundtable at the 2025 biennial EARLI conference, Graz, Austria
- Fütterer, T.** (2025, August). *Invited Symposium: AI-Based Assessment of Teaching and Learning: Advances and Challenges Using Multimodal Data*. Chair at the 2025 biennial EARLI conference, Graz, Austria
- Fütterer, T.**, Hou, R., Bühler, B., Bozkir, E., Bell, C., Kasneci, E., Gerjets, P., Trautwein, U. (2025, August). *Validating Automated Assessment of Teaching Effectiveness Using Multimodal Data*. Paper at the 2025 biennial EARLI conference, Graz, Austria
- Fabian, A., Tschönhens, F., Scherer, R., & **Fütterer, T.** (2025, August). *A study on the reciprocal relations of teachers' technology-related motivation and knowledge*. Paper at the 2025 biennial EARLI conference, Graz, Austria
- Fütterer, T.** (2025, August). *AI in Teacher Training – Concepts, Potentials, and Challenges of Prompts and Feedback*. Discussion at the 2025 biennial EARLI conference, Graz, Austria
- Fütterer, T.**, Hopp, M., Stürmer, K., & Göllner, R. (2025, August). *Automated Assessment of Teachers' Professional Vision in Written Classroom Reflections*. Paper at the 2025 biennial EARLI conference, Graz, Austria
- Tschönhens, F., Backfisch, I., **Fütterer, T.**, & Lachner, A. (2025, January). *TPACK in Aktion: Kontextabhängige Auswirkungen auf die Wissensintegration von Lehrkräften und Lehramtsstudierenden [TPACK in Action: Contextual effects of pre-service and in-service teachers' knowledge structures for technology integration]*. Paper at the 2025 annual meeting of the GEBF conference, Mannheim, Germany

- Fütterer, T.** & Dreher, A. (2025, January). Auf dem Weg zu adaptiven Online-Fortbildungen? Voraussetzungen von Lehrkräften und ihr Nutzungsverhalten [*Hit the road towards adaptive online professional development? Prerequisites of teachers and their usage behavior*]. Symposium at the 2025 annual meeting of the GEBF conference, Mannheim, Germany
- Fütterer, T.** & Chernikova, O.. (2025, January). Chancen und Risiken KI-gestützter Literaturüberblicke und Metaanalysen [*Chances and risks of AI-based literature reviews and meta-analyses*]. Symposium at the 2025 annual meeting of the GEBF conference, Mannheim, Germany
- Hoch, E., Brouër, B., & **Fütterer, T.** (2025, January). Metakognitive Einschätzungen und Selbstkonzept: Eine Längsschnittuntersuchung bei Schüler\*innen der Sekundarstufe [*Metacognitive and self-concept: A longitudinal study of secondary education students*]. Paper at the 2025 annual meeting of the GEBF conference, Mannheim, Germany
- Morina, F., Udvardi-Lakos, N., Fabian, A., Trautwein, U., & **Fütterer, T.** (2025, January). ALIFE: Strategies for designing effective adaptive online professional development courses for teachers. Poster at the 2025 annual meeting of the GEBF conference, Mannheim, Germany
- Fütterer, T.**, Campos, D. G., Gfrörer, T., Lavelle-Hill, R., Murayama, K., & Scherer, R. (2025, January). Wie kann man künstliche Intelligenz für systematische Literaturübersichten und Meta-Analysen nutzen? Ein systematischer Überblick über Tools und ein Leitfaden für Forscher:innen [*How can AI be used for systematic literature reviews and meta-analyses? A systematic overview of tools and a guide for scientists*]. Paper at the 2025 annual meeting of the GEBF conference, Mannheim, Germany
- Jaggy, A., **Fütterer, T.**, Jansen, T., & Trautwein, U. (2024, September). *Almighty ChatGPT? – Interindividual Differences in Gifted Students' Attitudes Towards the Omniscience of Artificial Intelligence*. Paper at the 53rd DGPs congress / 15th. ÖGP conference 2024, Vienna, Austria
- Hoch, E., Brouer, B., & **Fütterer, T.** (2024, September). *The Relation of Self-Concept and Metacognitive Judgments in a Sample of Secondary School Students*. Paper at the 2024 11th biennial EARLI SIG 16, Heidelberg, Germany
- Röhl, S., **Fütterer, T.**, & Cramer, C. (2024, August). *Use and Perceived Usefulness of Teaching-Related Student and Peer Feedback of Teachers in Germany*. Paper at the 2024 9th biennial EARLI SIG 18, Nicosia, Cyprus
- Göllner, R., **Fütterer, T.**, Leng, F., & Stürmer, K. (2024, August). *Hit the Road Towards an Automated Assessment of Written Reflections of Pre-Service Teachers*. Paper at the 2024 11th biennial EARLI SIG 11, Oxford, UK
- Hou, R., **Fütterer, T.**, Bühler, B., Bozkir, Efe, Gerjets, P., Trautwein, U., K., & Kasneci, K. (2024, July). *Automated assessment of encouragement and warmth in classrooms leveraging multi-modal emotional features and ChatGPT*. Paper at the 2024 annual meeting (25<sup>th</sup>) of the International Conference on Artificial Intelligence in Education (AIED), Recife – Pernambuco, Brazil
- Fütterer, T.**, Bühler, B., Hou, R., Goldberg, P., Kasneci, E., Gerjets, P., Stürmer, K., & Trautwein, U. (2024, June). *Automated Assessment of Multimodal Data to Predict Teaching Quality*. Paper at the 2024 annual meeting of the QUINT conference, Oslo, Norway
- Fütterer, T.**, Hoch, E., & Dumont, H. (2024, May). *Uncovering the relationship of technology-enhanced, adaptive teaching and situational interest in mathematics in a randomized trial*. Poster at the E-ADAPT conference, Potsdam, Germany
- Omarchevska, Y., **Fütterer, T.**, Dumont, H., Bernacki, M., Greene, J., & Scheiter, K. (2024, May). *Adaptive teaching and learning: A systematic review and meta-analysis*. Poster at the E-ADAPT conference, Potsdam, Germany
- Fütterer, T.**, Udvardi-Lakos, N., Fabian, A., Morina, F., & Trautwein, U. (2024, May). *Adaptive learning integrated framework for educators*. Poster at the E-ADAPT conference, Potsdam, Germany
- Fütterer, T.**, Fischer, C., Alekseeva, A., Chen, X., Tate, T., Warschauer, M., & Gerjets, P. (2024, April). *AI in Education: Examining the Global Reception of ChatGPT on Twitter*. Poster at the 2024 annual meeting of the AERA conference, Philadelphia, PA
- Morina, F., **Fütterer, T.**, Fischer, C. (2024, April). *Investigating Associations of Teacher Characteristics with Open Educational Resource Usage in Social Media Communities*. Roundtable at the 2024 annual meeting of the AERA conference, Philadelphia, PA
- Fabian, A., **Fütterer, T.**, Backfisch, I., Hübner, N., Paravicini, W., & Lachner, A. (2024, March). *What is TPACK? Investigating the internal structure of TPACK from a subject-specific angle using test-based instruments*. Paper at the 2024 35<sup>th</sup> international conference, Society for Information Technology and Teacher Education, Las Vegas, NV
- Fabian, A., **Fütterer, T.**, Backfisch, I., Hübner, N., Paravicini, W., & Lachner, A. (2024, March). *Was ist TPACK? Eine Studie zur Untersuchung des empirischen Zusammenhangs verschiedener Wissensfacetten zum Einsatz digitaler Medien [What is TPACK? Investigating the internal structure of TPACK from a subject-*

- specific angle using test-based instruments*]. Paper at the 2024 annual meeting of the GEBF conference, Potsdam, Germany
- Fütterer, T.**, Scheiter, K., Lachner, A., Hübner, N., & Stürmer, K. (2024, March). *Wie können Lehrpersonen für einen qualitativ hochwertigen, technologiegestützten Unterricht durch Fortbildungen vorbereitet werden? [How to promote high-quality technology-enhanced teaching through teacher professional development?]*. Paper at the 2024 annual meeting of the GEBF conference, Potsdam, Germany
- Jung, A., **Fütterer, T.**, Frenzel, A., Nagengast, B., & Murayama, K. (2024, March). *Wer inspiriert wen? Wechselseitige Beziehungen zwischen dem Enthusiasmus von Lehrpersonen und dem Interesse der Schüler:innen [Who Inspires Whom? Reciprocal Relationships Between Teacher Enthusiasm and Students' Interest]*. Paper at the 2024 annual meeting of the GEBF conference, Potsdam, Germany
- Fütterer, T.** (2023; November). *Tübinger Initiativen zum verantwortungsvollen und effektiven Einsatz von KI beim Lehren und Lernen [Tübingen initiatives for the responsible and effective use of AI in teaching and learning]*. Talk at the conference organized by the Joachim Herz Foundation „Adaptives Lernen und KI in der schulischen und beruflichen Bildung: Potenziale und Herausforderungen technologiegestützten Lehrens und Lernens“ [Adaptive learning and AI in school and vocational education: potentials and challenges of technology-supported teaching and learning], Hamburg, Germany
- Wurst, C., **Fütterer, T.**, & Goeze, A. (2023, September). *Digitale Medien im Fachunterricht einsetzen – Gelingensbedingungen einer Online-Fortbildung für Gymnasiallehrkräfte [Using digital media in the classroom - Conditions for the success of an online professional development program for secondary teachers]*. Talk at the annual Bundeskongress der Zentren für Lehrer\*innenbildung und Professional Schools of Education (BuKo), Münster, Germany
- Fütterer, T.**, Scheiter, K., Lachner, A., Hübner, N., & Stürmer, K. (2023, August). *How to promote high-quality technology-enhanced teaching through teacher professional development?*. Paper at the 2023 biennial EARLI conference, Thessaloniki, Greece
- Morina, F., **Fütterer, T.**, Rosenberg, J.M., Carpenter, J., & Fischer, C. (2023, August). *How do teachers in German Twitter communities share, perceive, and use materials?*. Paper at the 2023 biennial EARLI conference, Thessaloniki, Greece
- Tschönhens, F., **Fütterer, T.**, Franke, U., & Lachner, A. (2023, August). *Video annotations to support pre-service teachers' professional vision for technology integration*. Paper at the 2023 biennial EARLI conference, Thessaloniki, Greece
- Rehm, M., Klein, L., **Fütterer, T.**, Fischer, C., Lockton, M., Caduff, A., & Daly, A. J. (2023, August). *The social side of digitization: Knowledge mobilization among educational professionals*. Paper at the 2023 biennial EARLI conference, Thessaloniki, Greece
- Fütterer, T.**, Tan, T., Olsen, R. V., Sandsør, A. M. J., & Blömeke, S. (2023, August). *Differential effects of COVID-19 school closures on students' achievement*. Paper at the 2023 biennial EARLI conference, Thessaloniki, Greece
- Rzejak, D. & **Fütterer, T.** (2023, June). *Wege und Qualitäten des beruflichen Lernens von Lehrpersonen [Pathways and qualities of teacher professional learning]*. Symposium at the 2023 annual „Wie viel Wissenschaft braucht die Lehrer\*innenfortbildung“ conference, Feldkirch, Austria
- Fütterer, T.**, Rzejak, D., Mayr, J., & Lipowsky, F. (2023, June). *Interesse und Kompetenz: Verstärkende oder kompensierende Faktoren für die Teilnahme von Lehrer:innen an beruflichen Fort- und Weiterbildungen? [Interest and competence: Reinforcing or compensating factors for teachers' participation in professional development?]*. Paper at the 2023 annual „Wie viel Wissenschaft braucht die Lehrer\*innenfortbildung“ conference, Feldkirch, Austria
- Tschönhens, F., **Fütterer, T.**, Franke, U., Stürmer, K., & Lachner, A. (2023, May/June). *Video annotations to support pre-service teachers' professional vision for technology integration*. Paper at the 2023 annual meeting of the QUINT conference, Helsinki, Finland.
- Campos, D. G., **Fütterer, T.**, Gfrörer, T., Lavelle-Hill, R., König, L., Zitzmann, S., Hecht, M., Murayama, K., & Scherer, R. (2023, May). *Assessing the performance of machine learning algorithms for systematic review and meta-analysis in education: A benchmarking and evaluation project*. Paper at the 2023 annual Research Synthesis & Big Data Conference, Frankfurt/Main, Germany
- Fischer, C., Omarchevska, Y., **Fütterer, T.**, & Rosenberg, J. (2023, April). *Teacher collaboration and professional development on Twitter: An epistemic network analysis*. Paper at the 2023 annual meeting of the American Educational Research Association, Chicago, IL
- Richter, E., **Fütterer, T.**, Eisenkraft, A., & Fischer, C. (2023, April). *Examining motivational profiles of teachers participating in professional development activities during a nationwide science reform*. Paper at the 2023 annual meeting of the AERA conference, Chicago, IL

- Rehm, M., **Fütterer, T.**, Fischer, C., Lockton, M., Caduff, A., & Daly, A. J. (2023, April). *Digitization in international contexts: Comparing knowledge mobilization in Germany and the United States*. Paper at the 2023 annual meeting of the AERA conference, Chicago, IL
- Stoll, G. & **Fütterer, T.** (2023, March). *The roles of work values and personality traits in explaining vocational preferences*. Paper at the 2023 annual International Convention of Psychological Science, Brussels, Belgium
- Tschönhens, F., **Fütterer, T.**, Franke, U., Stürmer, K., & Lachner, A. (2023, February/March). *Einsatz von Videoannotationen zur Förderung der professionellen Wahrnehmung von technologie-gestützten Unterrichtssituationen [Use of video annotation to promote professional vision of technology-enhanced teaching situations]*. Paper at the 2023 annual meeting of the GEBF conference, Duisburg-Essen, Germany
- Leng, F., **Fütterer, T.**, Stürmer, K., & Göllner, R. (2023, February/March). *The role of the recipient determines how one reflects*. Paper at the 2023 annual meeting of the GEBF conference, Duisburg-Essen, Germany
- Fütterer, T.**, Stürmer, K., & Göllner, R. (2023, February/March). *Hit the road towards an automated assessment of written reflections of pre-service teachers*. Paper at the 2023 annual meeting of the GEBF conference, Duisburg-Essen, Germany
- Fütterer, T.** (2023, February/March). *A multi-faceted perspective on current approaches to reflect on teacher reflections*. Symposium at the 2023 annual meeting of the GEBF conference, Duisburg-Essen, Germany
- Morina, F., **Fütterer, T.**, Rosenberg, J., Carpenter, J. P. & Fischer, C. (2023, February/March). *Investigating how teachers share and use materials in German Twitter communities*. Paper at the 2023 annual meeting of the GEBF conference, Duisburg-Essen, Germany
- Schiefer, J., **Fütterer, T.**, & Wagner, W. (2023, February/March). *Machen die Lehrkräfte einen Unterschied? Die Relevanz individueller Charakteristika Lehrender in einem außerunterrichtlichen Lernsetting für Grundschulkinder [Do teachers make a difference? The Relevance of Individual Characteristics of Teachers in an Extracurricular Learning Setting for Elementary School Children.]*. Paper at the 2023 annual meeting of the GEBF conference, Duisburg-Essen, Germany
- Fütterer, T.** & Becker-Genschow, S. (2022, September). CC-TPACK-P - Cross-Phase Cooperation to Promote Teachers' TPACK in Physics. Project at the 1. fellow-meeting 5. cohort Kolleg Didaktik:digital, Ludwigsburg, Germany
- Hoch, E., **Fütterer, T.**, Lachner, A., Scheiter, K., & Stürmer, K. (2022, September). *Kann digitaler Unterricht auf Distanz lernwirksam sein? Eine Studie zur kognitiven Aktivierung während der Schulschließungen [Can digital distance education be effective for learning? A study of cognitive activation during school closures]*. Paper at the 2022 annual meeting of the DGPs conference, Hildesheim, Germany
- Fütterer, T.**, Hoch, E., Lachner, A., Scheiter, K., & Stürmer, K. (2022, August). *How cognitively activating was digitized instruction during school closures and how can teachers be supported?*. Paper at the 2022 9th biennial EARLI SIG 6/7, Zollikofen, Switzerland
- Fütterer, T.**, Stürmer, K., & Göllner, R. (2022, June). *Hit the road towards an automated assessment of reflection practices of pre-service teachers*. Project at the 2022 annual meeting of the QUINT conference, Hveragerði, Iceland.
- Fütterer, T.**, Hübner, N., Fishman, B., Eisenkraft, A., & Fischer, C. (2022, April). *Teacher professional development and self-efficacy during the AP science reform: A longitudinal perspective*. Paper at the 2022 annual meeting of the AERA conference, San Diego, CA
- Morina, F., **Fütterer, T.**, Hübner, N., Zitzmann, S., Trautwein, U., & Fischer, C. (2022, April). *Effectiveness of online professional development for teachers: A meta-analysis*. Paper at the 2022 annual meeting of the AERA conference, San Diego, CA
- Fütterer, T.** (2022, April). *A multi-faceted perspective on current approaches for high-quality teacher professional development*. Symposium at the 2022 annual meeting of the AERA conference, San Diego, CA
- Stürmer, K., **Fütterer, T.**, Hoch, E., Lachner, A., & Scheiter, K. (2022, March). *Kann digitaler Unterricht auf Distanz lernwirksam sein? Eine Studie zur kognitiven Aktivierung während der Schulschließungen [Can digital distance education be effective for learning? A study of cognitive activation during school closures]*. Paper at the 2022 annual meeting of the LERN conference, Frankfurt, Germany
- Stürmer, K., **Fütterer, T.**, Hoch, E., Lachner, A., & Scheiter, K. (2022, March). *Kann digitaler Unterricht auf Distanz lernwirksam sein? Eine Studie zur kognitiven Aktivierung während der Schulschließungen [Can digital distance education be effective for learning? A study of cognitive activation during school closures]*. Paper at the 2022 annual meeting of the GEBF conference, Bamberg, Germany

- Morina, F., **Fütterer, T.**, Hübner, N., Zitzmann, S., Trautwein, U., & Fischer, C. (2022, March). *A meta-analysis on the effectiveness of online professional development for teachers*. Paper at the 2022 annual meeting of the GEBF conference, Bamberg, Germany
- Fütterer, T.**, Hübner, N., Fishman, B., Eisenkraft, A., & Fischer, C. (2022, March). *Wechselwirkungen zwischen der Selbstwirksamkeit von Lehrpersonen und Fortbildungsmerkmalen: Eine Längsschnittperspektive [Interactions between teacher self-efficacy and professional development characteristics: A longitudinal perspective]*. Paper at the 2022 annual meeting of the GEBF conference, Bamberg, Germany
- van Waveren, L., **Fütterer, T.**, Hübner, N., Fischer, C. & Sälzer, C. (2022, March). *Spiegelt sich die Art des Zugangs zum Lehramt in der beruflichen Zufriedenheit in PISA 2015 und 2018 wider? [Is the nature of access to the teaching profession reflected in professional satisfaction in PISA 2015 and 2018?]*. Paper at the 2022 annual meeting of the GEBF conference, Bamberg, Germany
- Bareis, A., **Fütterer, T.**, Spengler, M., Boxhofer, E., Krammer, G., Mayr, J., Nausner, E., Pflanzl, B., Nagengast, B., & Trautwein, U. (2022, March). *Sagen Gewissenhaftigkeit, Interesse und deren Interaktion die Fortbildungsintensität von Lehrkräften vorher? [Do conscientiousness, interest, and their interaction predict teacher professional development intensity?]*. Paper at the 2022 annual meeting of the GEBF conference, Bamberg, Germany
- Tschönnhens, F., **Fütterer, T.**, Lachner, A., & Stürmer, K. (2022, March). *Selbstbeurteilungsfähigkeit von Lehrpersonen bezüglich ihres technologischen und technologisch-pädagogischen Wissens [Self-assessment ability of teachers regarding their technological and technological-pedagogical knowledge]*. Paper at the 2022 annual meeting of the GEBF conference, Bamberg, Germany
- Fütterer, T.** & Bardach, L. (2021, October). *Artificial intelligence and feedback in education -A systematic literature review*. Poster at the 2021 semiannual meeting of the LEAD Graduate School & Research Network
- van Waveren, L., **Fütterer, T.**, Hübner, N., Fischer, C., & Sälzer, C. (2021, April). *Is teachers' job satisfaction contingent on formal teacher training? Insights from PISA 2015*. Paper at the 2021 annual meeting of the AERA conference (online conference)
- Hoch, E., **Fütterer, T.** (2020, December). *Welche Kompetenzen sind nötig, um in einer digitalen Welt zu lernen? [What competencies are needed to learn in a digitalized world?]*. Paper at the ZfE-Forum 2020 „ZfE-Forum Bildung für eine digitale Zukunft“. (online conference)
- Fütterer, T.**, Hübner, N., Fischer, C., & Stürmer, K. (2020, December). *Heading for new Shores: Moving from Traditional to Modern Paradigm of Professional Development*. Poster at the 5th annual International NEPS Conference, Bamberg, Germany. [NEPS Poster Award 2020]
- Stürmer, K., Scheiter, K., Lachner, A., **Fütterer, T.**, & Hoch, E. (2020, December). *Gelingensbedingungen für das Unterrichten mit digitalen Medien –Zugänge aus dem tabletBW-Projekt [Conditions for successful teaching with digital media - Approaches from the tabletBW project]*. Poster at the 5th CeLeB-Conference, Hildesheim, Germany
- Fütterer, T.**, Cheng, X., Scheiter, K., & Stürmer, K. (2020, August). *Quality beats quantity: Investigating learning related effort in computer-based learning environments*. Paper at the 2020 8th biennial EARLI SIG 6/7, Tübingen, Germany.
- Fütterer, T.**, Hübner, N., Fischer, C., & Stürmer, K. (2020, June). *Heading for new shores: Moving from traditional to modern professional development*. Paper at the 2020 8th biennial EARLI SIG 11, Oldenburg, Germany (conference canceled)
- Cheng, X., **Fütterer, T.**, Scheiter, K., & Stürmer, K. (2020, April). *ICT in classrooms. Effects of tablet-based instruction on students leaning activities*. Poster at the 2020 annual meeting of the AERA conference, San Francisco, CA (conference cancelled)
- Cheng, X., **Fütterer, T.**, Scheiter, K. & Stürmer, K. (2020, March). *Does one-to-one tablet used in the classroom have an impact on student learning processes?*. Paper at the 8th annual GEBF conference, Potsdam, Germany (conference canceled)
- Fütterer, T.**, Hübner, N., Fischer, C., & Stürmer, K. (2020, March). *Muster der Fortbildungsaktivität von Lehrpersonen im Längsschnitt [Longitudinal analysis of teacher professional development patterns]*. Paper at the 8th annual GEBF conference, Potsdam, Germany (conference canceled)
- Fütterer, T.** (2020, March). *Internationale und nationale Perspektiven auf Fortbildungen von Lehrkräften: Zentrale Akteure im Fokus [International and national perspectives on teacher training: Central actors in focus]*. Symposium at the 8th annual GEBF conference, Potsdam, Germany. (conference canceled)
- Fütterer, T.** & Stürmer, K. (2019, March). *Do the right teachers get teaching quality profession development?*. Poster at the Teaching Quality Conference, Tübingen, Germany

- Fütterer, T. & Brouër, B.** (2018, September). *Der Einsatz von professional development portfolios in der zweiten Phase der Lehrkräfteausbildung [The use of professional development portfolios in the second phase of teacher training]*. Paper at the 83rd annual AEPF conference, Lüneburg, Germany
- Fütterer, T. & Brouër, B.** (2015, September). *Der Einsatz von Portfolios im Vorbereitungsdienst. Ergebnisse einer Bestandsanalyse in Schleswig-Holstein mit Ausblick auf eine experimentelle Interventionsstudie [The use of professional development portfolios in the second phase of teacher training. Results of a stock analysis in Schleswig-Holstein with an outlook for an experimental intervention study]*. Paper at the 80th annual AEPF conference, Göttingen, Germany
- Fütterer, T. & Brouër, B.** (2014, March). *Der Einsatz von Portfolios in der zweiten Phase der Lehramtsausbildung in Schleswig-Holstein [The use of professional development portfolios in the second phase of teacher training in Schleswig-Holstein]*. Poster at the 24th biennial DGfE congress, Berlin, Germany

## Invited Talks

- Fütterer, T.** (2025, December). *Auf dem Weg zu adaptiven Onlinefortbildungen [Towards adaptive online professional development]*. Invited talk presented at the University of Zürich.
- Fütterer, T. & Gerjets, P.** (2025, October). *Selbstreguliertes Lernen im Zeitalter von Digitalisierung und KI. Impulse und Folgerungen für die Aus- und Fortbildung [Self-regulated learning in the age of digitalization and AI. Implications and recommendations for teacher education and professional development]*. Invited talk presented at annual conference of the State Institute for School Quality and Teacher Training (ZSL) in Bad Wildbad
- Fütterer, T.** (2025, September). *Bildungsmythen - Zwischen Bauchgefühl und Befund [Educational Myths – Between Gut Feeling and Evidence]*. Invited talk presented at the Online-Bundesverband Nachhilfe- und Nachmittagsschulen e. V. (VNN) Academy, online
- Gerjets, P., **Fütterer, T.**, & Kuhn, J. (2025, July). *Selbstreguliertes Lernen im Zeitalter von Digitalisierung und KI [Self-regulated learning in the age of digitalization and AI]*. Invited talk presented at the symposium 'Self-regulation – a key prerequisite for successful learning and teaching' at the AI Center School in Heilbronn
- Fütterer, T.** (2024, November). *Digitalisierung und angewandte Künstliche Intelligenz im Bildungskontext: Potenziale für Lehre und Forschung [Digitalization and applied artificial intelligence in the educational context: potential for teaching and research]*. Invited talk presented at the Center for Teacher Training at University of Kaiserslautern-Landau
- Fütterer, T.** (2024, June). *Künstliche Intelligenz in der Bildung – Teil des Problems oder Teil der Lösung? [Artificial intelligence in education - part of the problem or part of the solution?]*. Invited talk presented at the Studium Generale, University of Tübingen
- Fütterer, T.** (2024, January). *Auf dem Weg zu einer automatisierten Auswertung schriftlicher Reflexionstexte von Lehrer:innen [Hit the road to an automated assessment of teachers' written reflections]*. Invited talk presented at the University of Mainz
- Fütterer, T.** (2023, December). *Technologie nutzen zum effizienten und effektiven Forschen und Lehren [Using technology for efficient and effective research and teaching]*. Invited talk presented at the Biology Didactics Forum of the Center for Didactics of Biology, University of Münster, Münster
- Fütterer, T.** (2023, May). *Einsatz von Technologie im Unterricht: Quantität oder Qualität? [Use of technology in the classroom: quantity or quality?]*. Invited talk presented at the School Internal Conference, Johannes-Kepler High School, Weil der Stadt
- Fütterer, T.** (2023, April). *Einsatz von Technologie im Unterricht: Quantität oder Qualität? [Use of technology in the classroom: quantity or quality?]*. Invited talk presented at the School Internal Conference, Vocational School, Crailsheim
- Fütterer, T.** (2023, February). *Einsatz von Technologie im Unterricht: Wie können Lehrer:innen in Fortbildungen darauf vorbereitet werden? [How can teachers be prepared for the use of technology in the classroom?]*. Invited talk presented at the colloquium series of the educational sciences, University of Potsdam, Potsdam
- Fütterer, T.** (2022, February). *Getting teachers ready to teach in a digitized world: Insight into different approaches*. Invited talk presented at the Brown Bag Seminar, Centre for Educational Measurement at University of Oslo (CEMO), Oslo
- Fütterer, T.** (2021, September). *Kognitive Aktivierung der Schüler\*innen durch den Einsatz digitaler Medien im Unterricht [Cognitive activation of students through the use of digital media in the classroom]*. Invited talk presented at the professional development, Akademie für Lehrerfortbildungen, Esslingen

- Fütterer, T.** (2021, June). *Einsatz digitaler Medien im Unterricht. Eine pädagogisch-psychologische Perspektive [Using digital media in the classroom. A pedagogical-psychological perspective]*. Invited talk presented at the School Internal Conference, Wentzinger High School, Freiburg
- Fütterer, T.** (2019, November). *Leistungsbeurteilung in der Schule. Erkenntnisse aus der psychologischen Diagnostik für die Praxis nutzbar machen [Performance assessment in schools. Making findings from psychological diagnostics usable in practice]*. Invited talk presented at the School Internal Conference, Wieland High School, Biberach.
- Feder, L. & **Fütterer, T.** (2019, May). *Portfolioarbeit aus empirischer Perspektive: Ein Forschungsüberblick mit Leerstellen [Portfolio work from an empirical perspective: A research overview with gaps]*. Invited talk presented at network conference "portfolio in teacher education", University of Konstanz, Konstanz
- Fütterer, T.** (2018, November). *Was ist guter Unterricht? Tipps aus der Empirischen Bildungsforschung [What is good teaching? Tips from empirical educational science]*. Invited talk presented at the School Internal Conference, Wieland High School, Biberach
- Fütterer, T.** (2014, Dezember). *Portfolio und Portfolioarbeit. Eine kurze Einführung [Portfolio and portfolio work. A short introduction]*. Invited talk presented at the Conference on Future Assessment of Applicants in Companies, Chambers of Commerce and Industry in Schleswig-Holstein, Kiel

## OPEN SCIENCE

### Preregistrations

- Bühler, B., **Fütterer, T.**, von Keyserlingk, L., Bozkir, E., Kasneci, E., Gerjets, P., & Trautwein, U. (2024, March 26). Mapping Mind Wandering to the 'Self-Regulated Learning Process, Multimodal Data, and Analysis Grid': A Systematic Review. <https://doi.org/10.17605/OSF.IO/7SP5A>
- Fütterer, T.**, Fahrbach, T., Hoch, E., Nagengast, B., Lachner, A., Stürmer, K., & Scheiter, K. (2024). The Effect of Tablet Computers on Student Achievement: Analyzing the Crucial Role of Teaching Effectiveness in a Randomized Trial. PsychArchives. <https://doi.org/10.23668/psycharchives.14161>
- Fütterer, T.**, Hoch, E., & Dumont, H. (2024). *Uncovering the Relationship of Technology-Enhanced, Adaptive Teaching and Situational Interest in Mathematics in a Randomized Trial*. PsychArchives. <https://doi.org/10.23668/psycharchives.14090>
- Tschönhens, F., **Fütterer, T.**, Franke, U., & Lachner, A. (2023). Professional vision in teaching with digital media. <https://aspredicted.org/2bt3j.pdf>
- Tschönhens, F., **Fütterer, T.**, & Lachner, A. (2023). Annotation Tool to Foster Professional Vision of Pre-Service Teachers. <https://aspredicted.org/72xs3.pdf>
- Tschönhens, F., **Fütterer, T.**, & Lachner, A. (2023). Highlighting Prompts – Using Annotation Tools to Foster Pre-Service Teachers PV. [https://aspredicted.org/BNK\\_WMB](https://aspredicted.org/BNK_WMB)
- Röhl, S., **Fütterer, T.**, & Cramer, C. (2023, September 22). BeProf-F: Main Study. <https://doi.org/10.17605/OSF.IO/VSZ42>
- König, L., Zitzmann, S., **Fütterer, T.**, Campos, D., Scherer, R., & Hecht, M. (2023, March 13). Evaluating the performance of different stopping rules for AI-assisted systematic screening with ASReview. <https://doi.org/10.17605/OSF.IO/UCZ8D>
- Fütterer, T.**, Rzejak, D., Mayr, J., & Lipowsky, F. (2023, March 13). Interest and Ability: Amplifying or Compensating Factors for Teachers' Participation in Professional Development?. <https://doi.org/10.17605/OSF.IO/6UBDH>
- Fütterer, T.**, Hasenbein, L., Wagner, W., Trautwein, U., Schreiber, W., Hillenbrand, C., ... Schulden, M. (2022, August 14). Motivation for change! How teacher motivation relates to the success of teacher professional development. <https://doi.org/10.17605/OSF.IO/NC6XY>
- Fütterer, T.**, Tan, T. C. A., Olsen, R. V., & Blömeke, S. (2022, August 11). Differential effects of COVID-19 school closures on students' learning. <https://doi.org/10.17605/OSF.IO/XJ6HV>
- Fabian, A., **Fütterer, T.**, Paravicini, W., Hübner, N., & Lachner, A. (2022, January 13). How is TPACK related to PCK and TK? A cross-sectional survey study using test-based instruments. <https://aspredicted.org/fb39n.pdf>
- Fütterer, T.**, Lachner, A., Scheiter, K., Scherer, R., & Stürmer, K. (2020). Will, skill or conscientiousness: What predicts teachers' ICT-related professional development?. <https://doi.org/10.23668/psycharchives.2867>
- Bareis, A., **Fütterer, T.**, Spengler, M., Krammer, G., Mayr, J., Nagengast, B., & Trautwein, U. (2020, November 23). Can conscientiousness, interest, and their interaction predict teachers' intensity in engaging in professional development?. <https://doi.org/10.17605/OSF.IO/3FXZS>

## Shared Data, Analyses Scripts, Materials

- Fütterer, T., Göllner, R., & Stürmer, K.** (2024, January 8). An intelligent feedback system for observing videotaped classroom situations (INFER). <https://doi.org/10.17605/OSF.IO/FDCV8>
- Campos, D., Fütterer, T., Gfrörer, T., Lavelle-Hill, R. E., Murayama, K., König, L., ... Scherer, R.** (2024, February 1). Screening Smarter, Not Harder: A Comparative Analysis of Machine Learning Screening Algorithms and Heuristic Stopping Criteria for Systematic Reviews in Educational Research. <https://doi.org/10.17605/OSF.IO/UYB7X>
- König, L., Zitzmann, S., Fütterer, T., Campos, D., Scherer, R., & Hecht, M.** (2024, February 7). When to stop and what to expect—An Evaluation of the performance of stopping rules in AI-assisted reviewing for psychological meta-analytical research. <https://doi.org/10.17605/OSF.IO/7YHRQ>
- Fütterer, T., Goldberg, P., Bühler, B., Sikimić, V., Trautwein, U., Gerjets, P., ... Kasneci, E.** (2024, February 1). Coding Manual - Preprint - Artificial Intelligence in Classroom Management: A Systematic Review on Educational Purposes, Technical Implementations, and Ethical Considerations. <https://doi.org/10.17605/OSF.IO/RSWX5>
- Fütterer, T., Goldberg, P., Bühler, B., Sikimić, V., Trautwein, U., Gerjets, P., ... Kasneci, E.** (2023, December 31). Data - Preprint - Artificial Intelligence in Classroom Management: A Systematic Review on Educational Purposes, Technical Implementations, and Ethical Considerations. <https://doi.org/10.17605/OSF.IO/XQMA7>
- Fütterer, T., Steinhauser, R., Zitzmann, S., Scheiter, K., Lachner, A., & Stürmer, K.** (2024, January 4). Data and R Code Belonging to the Publication "A Test to Assess Teachers' Knowledge of How to Operate Technology." <https://doi.org/10.17605/OSF.IO/G86M7>
- Fütterer, T., Steinhauser, R., Zitzmann, S., Scheiter, K., Lachner, A., & Stürmer, K.** (2024, January 3). Test Manual Belonging to the Publication "A Test to Assess Teachers' Knowledge of How to Operate Technology." <https://doi.org/10.17605/OSF.IO/7YNUK>
- Fütterer, T., Fischer, C., Alekseeva, A., Chen, X., Tate, T., Warschauer, M., & Gerjets, P.** (2023). Code belonging to the study "ChatGPT in education: Global reactions to AI innovations". [https://github.com/twitter-tuebingen/ChatGPT\\_project](https://github.com/twitter-tuebingen/ChatGPT_project)
- Fütterer, T., Backfisch, I., & Lachner, A.** (2023, January 14). Teachers' trajectories of technology integration during participating in a professional development program technology. Retrieved from <https://osf.io/qh8sk>
- Fütterer, T., Scherer, R., Scheiter, K., Stürmer, K., & Lachner, A.** (2023, January 7). Will, skill, or conscientiousness: What predicts teachers' intentions to participate in technology-related professional development? [Abstract, description of discrepancies from pre-registration, data and analyses of the final paper, literature]. Retrieved from <https://osf.io/bt4gi>
- Fütterer, T., Lachner, A., Scheiter, K., Stürmer, K., Sciences, H. R. I. O. E., & Leibniz-Institut Für Wissensmedien.** (2020). Dataset for: Will, skill or conscientiousness: What predicts teachers' ICT-related professional development? [Data set]. PsychArchives. <https://doi.org/10.23668/PSYCHARCHIVES.2869>
- Fütterer, T.** (2020). Code for: Will, skill or conscientiousness: What predicts teachers' ICT-related professional development? PsychArchives. <https://doi.org/10.23668/PSYCHARCHIVES.2870>

## RESEARCH GRANTS

### Awarded Research Grants

- Principal Investigator.** GEN-VET - Fostering Self-Regulated Learning in Vocational Students Through Generative AI Support. Joachim Herz Stiftung [€ 494,100.00]
- Principal Investigator.** INFER-IE - Insightful Educators. Stiftung Innovation in der Hochschullehre [€ 375,776.75]
- Co-Principal Investigator / Project Manager.** ERTA - European Robotics Teachers' Academy – Educational Robotics for STEM Skills, Arts and Humanities, Computational Thinking, Creativity, Emotional Intelligence, and Inclusion in Preschool and Early. ERASMUS-EDU-2025-PEX-TEACH-ACA, 101249425 [in total: € €1,499,900; University of Tübingen: € 245,769]
- Principal Investigator.** The Power of Feedback: Harnessing AI for Scalable, Evidence-Based Mathematics Instruction. aim - Akademie für Innovative Bildung und Management Heilbronn-Franken gemeinnützige GmbH [€ 290,480 including project overhead allowance]
- Co-Principal Investigator.** Metacognitive and Motivational Requirements of Using Generative Artificial Intelligence to Support Self-Regulated Learning. Promotion of Junior Researchers 2025 within the framework of the Excellence Strategy, University of Tübingen [€ 27,460]

**Co-Principal Investigator.** Cooperation agreement with the Institute for Educational Quality Improvement (IQB) within the project StarS – Starting Strong in Primary School (German: Stark in die Grundschule starten). [€ 105,000]

**Principal Investigator.** AEyeCoL: Advanced Understanding of Eye Gaze in Co-Located Collaborative Learning. Deutsche Forschungsgemeinschaft (DFG) [in total: € 535,277; University of Tübingen: € 219,760]

**Principal Investigator.** Mapping AI literacy skills and self-regulation competencies. Vodafone foundation [€ 50.000,00]

**Principal Investigator.** Enhancing Teaching Quality with Artificial Intelligence. Hector Innovation Grant [€ 930.000,00]

**Principal Investigator.** AI-Enhanced Feedback System for Observing and Interpreting Classroom Practices in Teacher Education. Seed Funding for Joint Projects between the University of Tübingen and UNC-Chapel Hill 2024 [€ 20.000,00]

**Principal Investigator.** The European Association for Research on Learning and Instruction (EARLI) Emerging Field Group (EFG) -13 on Automated Assessment of Teaching Effectiveness Using Multimodal Data. <https://www.earli.org/efg-13> [€ 20.000,00]

**Principal Investigator.** Attractive Tendering: How Teachers' Motivation can be Increased to Participate in Adaptive Online Professional Development Courses. LEAD Intramural Research Grant 2024, University of Tübingen [€ 9.421,23]

**Principal Investigator.** Promoting Professional Competencies in Education: The Artistry of Utilizing Videos – A Systematic Literature Review. Tübingen School of Education, University of Tübingen [€ 5.000,00]

**Principal Investigator.** Enhanced Excellence in Online Professional Development, Learning Analytics, and Teaching Effectiveness (EXCELLATE). Hector Foundation Grant 2023, University of Tübingen [€ 64.575,00]

**Principal Investigator.** Adaptive Learning Integrated Framework for Educators (ALIFE). Hector Foundation Grant 2023, University of Tübingen [€ 147.748,00]

**Principal Investigator.** Teachers' Continuing Professional Development Using Feedback (BeProf-Feedback). LEAD Intramural Research Grant 2023, University of Tübingen [€ 10.000,00]

**Principal Investigator.** Artificial Intelligence Assisted Systematic Literature Reviews and Meta-Analyses. LEAD Intramural Research Grant 2022, University of Tübingen [€ 9.616,00]

**Principal Investigator.** CC-TPACK-P. Cross-Phase Cooperation to Promote Teachers' Technological-Pedagogical Content Knowledge in Physics. Joachim Herz Stiftung [€ 15.697,00]

**Principal Investigator.** Evaluation einer Fortbildungsinitiative für Lehrpersonen im Kontext Digitalisierung [Evaluation of a professional development initiative for teachers in the context of digitization]. Dr. Hans Riegel-Stiftung [€ 40.000,00]

**Principal Investigator.** Duration of Teacher Professional Development as a Quality Indicator - A Systematic Literature Review and Meta-Analysis. Tübingen Postdoctoral Academy for Research on Education (PACE) Intramural Research Grant 2022, University of Tübingen [€ 8.656,00]

**Principal Investigator.** A Certainty-Uncertainty Paradox. International Network Portfolio [€ 1.020,00]

**Principal Investigator.** Tests für technologisches – und technologisch-pädagogisches Wissen von Lehrer\*innen [Tests for technological - and technological-pedagogical knowledge of teachers]. Dr. Hans Riegel-Stiftung, Ad Hoc Special Funding 2021 [€ 4.900,00]

**Principal Investigator.** Artificial Intelligence and Feedback in Education -A Systematic Literature Review. LEAD Intramural Research Grant 2021, University of Tübingen [€ 10.402,00]

**Principal Investigator.** Technologisch-pädagogisches Wissen von Lehrpersonen zum Einsatz digitaler Medien [Technological-pedagogical knowledge of teachers regarding the use of digital media]. Promotion of Junior Researchers 2020 within the framework of the Excellence Strategy, University of Tübingen [€ 24.031,00]

## Research Grant Affiliations

**WoLKE-Wo bieten KI-Methoden Lösungen für fachdidaktische Herausforderungen? [Where do AI methods offer solutions to didactic challenges?]**

*Funding agency:* Ministerium für Wissenschaft, Forschung und Kunst Baden-Württemberg

*Awarded amount:* € 671.568,00

*Award number:* MWK42-7810-17/1/6

*Role on project:* Assoziierter Partner [Associated partner]

*Duration:* 01.01.2024 - 31.12.2026

Grant awarded to Jun.-Prof. Dr. Heiko Holz, Pädagogische Hochschule Ludwigsburg (PI), Prof. Dr. Detmar Meurers, Universität Tübingen, and Jun.-Prof. Dr. Luzia Leifheit, Pädagogische Hochschule Schwäbisch Gmünd

**PetraKIP-Persönliches transparentes KI-basiertes Portfolio für die Lehrerbildung [Personal transparent AI-based portfolio for teacher training]**

*Funding agency:* Bundesministerium für Bildung und Forschung [Federal Ministry of Education and Research]

*Awarded amount:* € 818.382,86

*Award number:* # must be entered.

*Role on project:* Assoziierter Partner [Associated partner]

*Duration:* 01.03.2021 - 29.02.2024

Grant awarded to Prof. Dr. Ralf Romeike, Didaktik der Informatik (PI, Freie Universität Berlin), Prof. Dr. Christoph Benzmüller (PI, Dahlem Center for Machine Learning and Robotic), Prof. Dr. Tim Landgraf (PI, Dahlem Center for Machine Learning and Robotic), and Prof. Dr. Michaela Gläser-Zikuda (Friedrich-Alexander-Universität Erlangen-Nürnberg, Schulpädagogik mit dem Schwerpunkt empirische Unterrichtsforschung)

**Travel Grants**

**Lab visit, Centre for Educational Measurement at University of Oslo (CEMO),** Gustafsson & Skrondal  
Visiting Scholarship [€ 7.000,00]

**Lab visit, Stanford Graduate School of Education,** Tübingen Postdoctoral Academy for Research on Education (PACE) [€ 2.882,00]

**HONORS, FELLOWSHIPS, AND AWARDS**

|             |                                                                                                                                                                                                                                                                                  |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2025</b> | <b>Poster Award</b> (shared-first) at the 109th International NEPS Conference (AERA Division C), Denver, United States of America. Poster title: <i>Who Inspires Whom? Reciprocal Relationships Between Teachers' Enthusiasm and Students' Interest and Enjoyment</i>            |
| <b>2025</b> | <b>Paper Award</b> at the 12 <sup>th</sup> GEBF Conference, Mannheim, Germany. Paper title: <i>Screening Smarter, Not Harder: A Comparative Analysis of Machine Learning Screening Algorithms and Heuristic Stopping Criteria for Systematic Reviews in Educational Research</i> |
| <b>2022</b> | Fellow in the Didactics:Digital Research Group [Kolleg Didaktik:digital] of the Joachim Herz Foundation                                                                                                                                                                          |
| <b>2020</b> | <b>Poster Award</b> at the 5 <sup>th</sup> International NEPS Conference, Bamberg, Germany. Poster title: <i>Heading for New Shores: Moving From Traditional to Modern Paradigm of Teacher Professional Development</i>                                                          |

**COORDINATION**

|                    |                                                                          |
|--------------------|--------------------------------------------------------------------------|
| <b>2022 – 2024</b> | A European Theory-Practice Collaboration for Adaptive Teaching (E-ADAPT) |
|--------------------|--------------------------------------------------------------------------|

**CONSULTING**

|             |                                                                                                                      |
|-------------|----------------------------------------------------------------------------------------------------------------------|
| <b>2024</b> | Development of test to assess students' digital media competence (MTO: <a href="https://mto.de">https://mto.de</a> ) |
|-------------|----------------------------------------------------------------------------------------------------------------------|

**TEACHING EXPERIENCE**

**University Teaching**

|                           |                                                                                                                                                |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2018 - present</b>     | <b><u>University of Tübingen, Germany</u></b>                                                                                                  |
| Winter 24                 | Teaching Quality (Seminar)                                                                                                                     |
| Winter 24                 | Digital Transformation (Module in the Master of Arts Schulmanagement und Leadership)                                                           |
| From Summer 20 to present | Supervision of the internship for students in the "Master of Science Empirical Educational Research and Educational Psychology (EBPP)" program |

|                                                    |                                                  |
|----------------------------------------------------|--------------------------------------------------|
| From Summer 20 to present (each Summer and Winter) | Introduction to Educational Psychology (Lecture) |
| Summer 18, 20                                      | Diagnostic, Intervention, Evaluation (Seminar)   |
| Summer 18                                          | Quantitative Data Analysis (Seminar)             |
| Winter 18-19, 19-20, 20-21                         | Quantitative Data Collection (Seminar)           |
| Summer 21                                          | Professional Vision (Seminar)                    |
| Winter 21-22                                       | Research Data Management (Seminar)               |
| Summer 22                                          | Research Colloquium (Colloquium)                 |
| <b>2012 - 2018</b>                                 | <b><u>University of Kiel, Germany</u></b>        |
| Each Winter                                        | Self-Regulated Learning (Seminar)                |
| Each Summer                                        | Motivation and Performance Assessment (Seminar)  |

### PROFESSIONAL DEVELOPEMENT WORKSHOPS OFFERED

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| July 2025                      | ML-gestützte Forschungssynthesen in der Praxis: Effizienzsteigerung und Qualitätssicherung [ML-supported research syntheses in practice: Increasing efficiency and ensuring quality]                                                                                                                                                                                                                                                                                          |
| February 2025                  | Educational myths                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| July 2024                      | AI-tools for systematic reviews and meta-analyses                                                                                                                                                                                                                                                                                                                                                                                                                             |
| March 2024                     | Digital gestützter Unterricht und Kultur der Digitalität [Technology-enhanced teaching and the culture of digitality]                                                                                                                                                                                                                                                                                                                                                         |
| March 2024                     | Program committee member of the workshop AI in Education: Ethical and Epistemic Perspectives at the Eindhoven University of Technology                                                                                                                                                                                                                                                                                                                                        |
| August 2022 / April & May 2023 | Cognitive activation in digitally supported teaching [Kognitive Aktivierung im digital gestützten Unterricht]<br>An online professional development course on the use of digital media in the classroom - theoretical conception and practical implementation in a discourse between science and practice [Eine Online-Fortbildung zum Einsatz digitaler Medien im Unterricht – Theoretische Konzeption und praktische Umsetzung im Diskurs zwischen Wissenschaft und Praxis] |
| July 2021                      | Using digital media in lessons to promote learning [Digitale Medien im Unterricht lernförderlich einsetzen]                                                                                                                                                                                                                                                                                                                                                                   |
| April-September 2021           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### PROFESSIONAL DEVELOPEMENT WORKSHOPS ATTENDED

|                       |                                                                                                       |
|-----------------------|-------------------------------------------------------------------------------------------------------|
| April 2024-April 2025 | Certificate Program Science Communication [48h]                                                       |
| November 2023         | Power analysis through simulation in R [13h]                                                          |
| February-March 2023   | Good scientific practice for supervisors [5h]                                                         |
| February 2023         | (Semi) automated creating codebooks: Promote reproducibility and reuse with the codebook package [2h] |
| January 2023          | Preregistration in Psychology [3h]                                                                    |
| December 2022         | Data protection training [2h]                                                                         |
| January-April 2022    | Certificate Program Leadership [48h]                                                                  |
| April-May 2021        | Conflict Management [16h]                                                                             |
| March 2020            | Media (public relation) training [8h]                                                                 |
| June 2019             | GESIS Data management [16h]                                                                           |
| January 2019          | Basic Knowledge of Third-Party Funding Applications [4h]                                              |
| September 2017        | Agile Project Management and Kanban [16h]                                                             |
| May 2016              | DGfE Summer School on Quantitative Methods [40h]                                                      |
| April 2017            | Advanced Course Multivariate Statistics With R [16h]                                                  |
| April 2015            | IPN Winter School on Quantitative Methods [24h]                                                       |
| March 2015            | Basic Course R [16h]                                                                                  |
| March 2014            | Basic Training in University Didactics [16h]                                                          |
| May 2013              | DGfE Summer School on Quantitative Methods [40h]                                                      |

## ACADEMIC SERVICE

### Committee Work

|                |                                                                                                                                                                      |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | <u>University of Tübingen, Germany</u>                                                                                                                               |
| 2024 - present | Representative of the scientific staff on the steering board of the Hector Research Institute of Education Sciences and Psychology                                   |
| 2023 - present | Member of selection committee for the professional development Master of Arts "Schulmanagement und Leadership"                                                       |
| 2019 - present | Search Committee for Faculty Applicants, Hector Research Institute of Education Sciences and Psychology (Committee Member)                                           |
| 2019 - 2022    | Representative of the Postdoctoral Students of the Graduate School & Research Network LEAD [Learning, Educational Achievement, and Life Course Development, GSC1028] |
| 2018 - present | Representative of the Scientific Staff on the Advisory Board of the Hector Research Institute of Education Sciences and Psychology                                   |

### Organizational Affiliations

- Member of the Digital Divide in Education Research Hub (DiDiRes), led by Ronny Scherer: <https://www.uv.uio.no/cemo/english/research/projects/digital-divide-in-education-research-hub/index.html>
- Facilitator of the EARLI Emerging Field Group (EFG) -13 on Automated Assessment of Teaching Effectiveness Using Multimodal Data. <https://www.earli.org/efg-13>
- Full member of the Tübingen Center for Digital Education (TueCeDE)
- Full member of the European Association for Research on Learning and Instruction (EARLI)
- Full member of the European Association for Research on Learning and Instruction (EARLI) Sepcial Interest Group 7 "Technology-Enhanced Learning and Instruction"
- Full member of the European Association for Research on Learning and Instruction (EARLI) Sepcial Interest Group 18 "Educational Effectiveness and Improvement"
- Full member of the Society for Empirical Educational Research (GEBF - Gesellschaft für Empirische Bildungsforschung)
- Associated postdoc of the LEAD Graduate School [GSC1028], funded by the Excellence Initiative of the German federal and state governments
- Member of the Tübingen Postdoctoral Academy for Research on Education (PACE)
- Associated member of the Tübingen School of Education (TüSE)
- Founder and Member of the Research Network "portfolios in education". <https://uni-tuebingen.de/de/168549>

### Ad-hoc Reviewer

- British Journal of Educational Psychology
- Contemporary Educational Psychology
- Computers & Education: Artificial Intelligence
- Computers & Education Open
- Computers & Education
- Educational Psychology Review
- Frontiers in Psychology
- Humanities & Social Sciences Communications
- Journal of Teacher Education
- Lehrerbildung auf dem Prüfstand
- Learning and Individual Differences
- Learning and Instruction
- Personality and Social Psychology
- Research Synthesis Methods
- Social Psychology of Education
- Teaching and Teacher Education

- Teachers and Teaching: Theory and Practice
- The Elementary School Journal
- Unterrichtswissenschaft
- Zeitschrift für Bildungsforschung
- Zeitschrift für Erziehungswissenschaft
  
- EARLI (2023, 2025), biennial conference
- GEBF (2020, 2021, 2022, 2023, 2024, 2025), annual conference
- SIG 6 Instructional Design (2020, 2022) EARLI biennial conference
- SIG 7 Technology-Enhanced Learning And Instruction (2020, 2022), EARLI biennial conference

### **Promoting Young Professionals**

- Daily Supervisor of PhD Students
- Supervisor of Bachelor and Master Theses
- Supervisor of Student Assistants
- Supervisor of Interns