

# Tim Hagen Fütterer

---

Eberhard Karls University of Tübingen  
Hector Research Institute of Education Sciences and Psychology  
Europastraße 6, Room 402  
72072 Tübingen, Germany  
tim.fuetterer@uni-tuebingen.de

## PERSONAL DATA

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

## PROFESSIONAL APPOINTMENTS

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

## ACADEMIC EDUCATION

04/2023	<b><u>University of Oslo, Norway</u></b> 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) Mentor: Prof. Ronny Scherer, Prof. Sigrid Blömeke
01/2018 – 03/2018	<b><u>Stanford University, CA, United States of America</u></b> Visiting Student Researcher at the Graduate School of Education Mentor: Prof. Maria Ruiz-Primo
11/2017	<b><u>Kiel University, Germany</u></b> <b>Ph.D. Doctor of Philosophy in Educational Studies</b> Program Area: Professional Development of Teachers Concentration: Professional Development Portfolios in Preparatory Service [summa cum laude] Mentor: Prof. Birgit Brouër Reviewer: Prof. Birgit Brouër, Prof. Nicole Welter, Prof. Michaela Gläser-Zikuda
2006 - 2012	<b>Erste Staatsprüfung für das Lehramt an Gymnasien und Gesamtschulen</b>

Teaching certificate for teaching in German college track secondary schools  
[Equivalent to Bachelor and Master]  
Subjects: Mathematics, Economics and Politics

## PUBLICATIONS AND PRESENTATIONS

### Journal Articles With Peer-Review

- Tschönhens, F., Backfisch, I., **Fütterer, T.**, & Lachner, A. (2024). TPACK in action: Investigating contextual effects of expert and novice teachers' knowledge structures for technology integration. *Manuscript submitted for publication* (revise and resubmit).
- Fütterer, T.**, Goldberg, P., Bühler, B., Sikimić, V., Trautwein U., Gerjets, P., Stürmer, K., & Kasneci K. (2023). Artificial intelligence in classroom management – A systematic review on technical implementations, educational purposes, and ethical considerations. *Manuscript submitted for publication* (under review).
- König, L., Zitzmann, S., **Fütterer, T.**, Campos, D. G., Scherer, R., & Hecht, M. (2023). When to stop and what to expect - Evaluation of the performance of stopping rules in AI-assisted reviewing for psychological meta-analytical research. *Manuscript submitted for publication* (under review).
- Bareis, A., **Fütterer, T.**, Spengler, M., Trautwein, U., Nagengast, B., Krammer, G., Boxhofer, E., Nausner, E., Pflanzl, B., & Mayr, J. (2023). Interest is a stronger predictor than conscientiousness for teachers' intensity in engaging in professional development. *Manuscript submitted for publication* (under review).
- Morina, F., **Fütterer, T.**, Hübner, N., Zitzmann, S., & Fischer, C. (2023). Effects of online teacher professional development on teacher, classroom, and student level outcomes: A meta-analysis. *Manuscript submitted for publication* (revise and resubmit).
- Bardach, L., Bostwick K. C. P., **Fütterer, T.**, Kopatz, M., Memarpour Hobbi D., Klassen, R.M. & Pietschnig, J. (2023). A meta-analysis on teachers' mindset. *Manuscript submitted for publication* (revise and resubmit).
- 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*.
- Hui, R., **Fütterer, T.**, Bühler, B., Bozkir, E., Gerjets, P., Trautwein U., & Kasneci K. (2024). Automated assessment of encouragement and warmth in classrooms leveraging multimodal emotional features and ChatGPT. *Artificial Intelligence in Education*.
- Fütterer, T.**, Backfisch, I., & Lachner, A. (2024). Teachers' trajectories of technology integration during participating in an online professional development. *Zeitschrift für Erziehungswissenschaft*.
- 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 of 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>

## Books

- Fütterer, T.** (2019). *Professional Development Portfolios im Vorbereitungsdienst. Die Wirksamkeit von Lernumgebungen auf die Qualität der Portfolioarbeit [Professional development portfolios in teacher education. 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

- Rehm, M., **Fütterer, T.**, Fischer, C., Lockton, M. Caduff, A., & Daly, A. J. (2023). The role of knowledge brokers in supporting social opportunity spaces. *Manuscript submitted for publication* (under review).
- Goldberg, P. & **Fütterer, T.** (2023). Virtual reality as a tool in research on teachers' professional vision. *Manuscript submitted for publication* (revise and resubmit).
- Fütterer, T.**, Stürmer, K., & Göllner, R. (2023). 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.**, 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>
- Fütterer, T.** (2023). Adaptiver Unterricht: Heterogenität im Klassenzimmer optimal begegnen [Adaptive teaching: The best way to deal with heterogeneity in the classroom]. *Magazin Forum Bildung Digitalisierung*. <https://magazin.forumbd.de/lehren-und-lernen/adaptiver-unterricht-heterogenitaet-im-klassenzimmer-optimal-begegnen/>
- Fütterer, T.** (2023). Adaptiv, intelligent und personalisiert: Einsatz von künstlicher Intelligenz im Unterricht [Adaptive, intelligent and personalized: Using artificial intelligence in the classroom]. *Community Call Forum Bildung Digitalisierung & Kompetenzverbund lernen:digital*. <https://www.forumbd.de/event-tags/community-call/> & <https://lernen.digital/veranstaltungen/einsatz-von-kuenstlicher-intelligenz-im-unterricht/>
- Fütterer, T.** (2023). Auswirkungen von Covid-19 Schulschließungen auf schulische Leistungen [Differential Effects of COVID-19 School Closures on Students' Learning]. *LEAD.schule*. <https://lead.schule/aktuelle-studien/Auswirkungen-von-Covid-19-Schließungen-auf-schulische-Leistungen>

- Fütterer, T.** & Scheiter, K. (2023). Wie gelingt lernwirksamer Unterricht mit digitalen Medien? [How can digital media be used to teach effectively?]. *campus schulmanagement*.
- Fütterer, T.** (2023). Zufriedenheit im Lehrberuf: Eine Frage der Ausbildung? [Satisfaction in the teaching profession: A question of training?]. *campus schulmanagement*. <https://www.campus-schulmanagement.de/magazin/zufriedenheit-im-lehrberuf-eine-frage-der-ausbildung>
- Fütterer, T.** (2022). Quereinsteiger in Schulen oft weniger zufrieden [Career changers in schools often less satisfied]. *LEAD.schule*. <https://lead.schule/blog/quereinsteiger-in-schulen-oft-weniger-zufrieden>
- Fütterer, T.** (2022). Digitale Medien im Unterricht – viel hilft viel? [Digital media in the classroom - a lot helps a lot?]. *Blog Bob Blume*. <https://bobblume.de/2022/04/29/digitale-medien-im-unterricht-viel-hilft-viel/>
- Tomann, J., **Fütterer, T.**, & Brouër, B. (2018). Interkulturelles Lernen im Tandem. Eine Mixed-Methods-Studie zur Entwicklung interkultureller Kompetenzen im Tandemprojekt kulturgrenzenlos e. V. [Intercultural learning in a tandem. A mixed-methods study on the development of intercultural competencies in the tandem project kulturgrenzenlos e. V.]. *TALENTE*, 29(14), 44-63.
- 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.
- Fütterer, T.** (2014). Talente entdecken und fördern durch Portfolioarbeit. Ein kurzer Aufriss eines komplexen Instruments [Discovering and promoting talents through portfolio work. A brief outline of a complex instrument]. *TALENTE*, 10(22), 14-17.

### Conference Presentations

- 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 35th 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 AERA conference, 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 American Educational Research Association, 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
- Tschönhens, 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 American Educational Research Association (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). *Gelingsbedingungen 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 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 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.** (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 and Analyses Scripts

**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.,** Steinhäuser, 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.,** Steinhäuser, 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.,** Steinhäuser, R., Zitzmann, S., Scheiter, K., Lachner, A., & Stürmer-Schröpfer, K. (2023, November 17). OSF project belonging to the publication "A test to assess teachers' knowledge about how to operate technology". <https://doi.org/10.17605/OSF.IO/TGYAX>

**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.** Promoting Professional Competencies in Education: The Artistry of Utilizing Videos – A Systematic Literature Review. Tübingen School of Education, University of Tübingen [€ 5.000]
- Principal Investigator.** Enhanced Excellence in Online Professional Development, Learning Analytics, and Teaching Effectiveness (EXCELLATE). Hector Foundation Grant 2023, University of Tübingen [€ 64.575]
- Principal Investigator.** Adaptive Learning Integrated Framework for Educators (ALIFE). Hector Foundation Grant 2023, University of Tübingen [€ 147.748]
- Principal Investigator.** Teachers' Continuing Professional Development Using Feedback (BeProf-Feedback). LEAD Intramural Research Grant 2023, University of Tübingen [€ 10.000]
- Principal Investigator.** Artificial Intelligence Assisted Systematic Literature Reviews and Meta-Analyses. LEAD Intramural Research Grant 2022, University of Tübingen [€ 9.616]
- Principal Investigator.** CC-TPACK-P. Cross-Phase Cooperation to Promote Teachers' Technological-Pedagogical Content Knowledge in Physics. Joachim Herz Stiftung [€ 15.697]
- 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]
- 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]
- Principal Investigator.** A Certainty-Uncertainty Paradox. International Network Portfolio [€ 1.020]
- 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]
- Principal Investigator.** Artificial Intelligence and Feedback in Education -A Systematic Literature Review. LEAD Intramural Research Grant 2021, University of Tübingen [€ 10.402]
- 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, University of Tübingen [€ 24.031]

### 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 Benz Müller (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]

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

## HONORS, FELLOWSHIPS, AND AWARDS

**2020** **Poster Award** at the 5<sup>th</sup> International NEPS Conference, Bamberg, Germany.  
Postertitle: *Heading for New Shores: Moving From Traditional to Modern Paradigm of Teacher Professional Development*

## COORDINATION

**2022 - present** A European Theory-Practice Collaboration for Adaptive Teaching (E-ADAPT)

## CONSULTING

**2024** Development of test to assess students' digital media competence (MTO: <https://mto.de>)

## TEACHING EXPERIENCE

### University Teaching

#### 2018 - present

From Summer 20 to present

From Summer 20 to present (each Summer and Winter)

Summer 18, 20

Summer 18

Winter 18-19, 19-20, 20-21

Summer 21

Winter 21-22

Summer 22

#### University of Tübingen, Germany

Supervision of the internship for students in the "Master of Science Empirical Educational Research and Educational Psychology (EBPP)" program

Introduction to Educational Psychology (Lecture)

Diagnostic, Intervention, Evaluation (Seminar)

Quantitative Data Analysis (Seminar)

Quantitative Data Collection (Seminar)

Professional Vision (Seminar)

Research Data Management (Seminar)

Research Colloquium (Colloquium)

#### 2012 - 2018

Each Winter

Each Summer

#### University of Kiel, Germany

Self-Regulated Learning (Seminar)

Motivation and Performance Assessment (Seminar)

## PROFESSIONAL DEVELOPMENT WORKSHOPS OFFERED

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 and Online Cognitive activation in digitally supported teaching [Kognitive Aktivierung im digital gestützten Unterricht]

August 2022 / April & May 2023 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

April-September 2021

Using digital media in lessons to promote learning [Digitale Medien im Unterricht lernförderlich einsetzen]

## PROFESSIONAL DEVELOPMENT WORKSHOPS ATTENDED

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

#### University of Tübingen, Germany

2019 - 2022	Representative of the Postdoctoral Students of the Graduate School & Research Network LEAD [Learning, Educational Achievement, and Life Course Development, GSC1028]
2019 - present	Search Committee for Faculty Applicants, Hector Research Institute of Education Sciences and Psychology (Committee Member)
2018 - present	Representative of the Scientific Staff on the Advisory Board of the Hector Research Institute of Education Sciences and Psychology

### Organizational Affiliations

- Full member of the Tübingen Center for Digital Education (TueCeDE)
- Full member of the European Association for Research on Learning and Instruction (EARLI)
- Fellow in the Didactics:Digital Research Group [Kolleg Didaktik:digital] of the Joachim Herz Foundation
- 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

- Computers & Education
- Computers & Education Open
- Frontiers in Psychology Personality and Social Psychology
- Humanities & Social Sciences Communications
- Journal of Teacher Education
- Learning and Individual Differences
- 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), biennial conference
- GEBF (2020, 2021, 2022, 2023), annual conference
- SIG 6 Instructional Design (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