



LEAD

Graduate School & Research Network

LEAD Retreat

Program

October 15-17, 2025

Blaubeuren, Germany

Wednesday, October 15th, 2025

Day 1

Time	Topic	Place
07:30am	Bus Departure from Tübingen	<i>Central Bus station</i>
09:00am – 09:30am	Arrival at the Venue & Coffee and Snacks	<i>Foyer</i>
09:30am – 09:50am	Welcome and Introduction <i>by the LEAD Co-Directors</i>	<i>Blautopf</i>
09:50am – 09:55am	Organisational Information about the Retreat <i>by LEAD Scientific Coordination</i>	<i>Blautopf</i>
09:55am – 10:45am	New Members' Presentations	<i>Blautopf</i>
11:00am – 12:00pm	Keynote “The Psychology of Science Denial: Challenges and Solutions” <i>by Gale Sinatra</i>	<i>Blautopf</i>
12:00pm – 01:00pm	Lunch with randomized seating order	<i>Restaurant</i>
01:00pm – 01:45pm	Social Walk	<i>Meeting Place: Foyer</i>
02:00pm – 02:45pm	Input Baden-Württemberg Stiftung <i>by Theresia Bauer</i>	<i>Blautopf</i>
02:45pm – 03:30pm	Interactive Format	<i>Blautopf</i>
03:30pm – 04:00pm	Coffee Break	<i>Foyer</i>
04:00pm – 05:00pm	Keynote “Learning Analytics: Responsible Use of Data” <i>by Oleksandra Poquet</i>	<i>Blautopf</i>
05:00pm – 06:00pm	(Newcomer) Poster Session (1)	<i>Foyer</i>
06:00pm – 07:00pm	Dinner	<i>Restaurant</i>
07:00pm – 08:00pm	PhD Assembly & Postdoc Assembly	<i>Blautopf & Blaufels</i>
08:15pm – open end	Social Event <i>PhD Representatives & New PhD Candidates</i>	<i>Blautopf</i>



Thursday, October 16th, 2025

Day 2

Time	Topic		Place
07:00am	Morning Run with Wy Ming		<i>Foyer of the venue</i>
07:00am – 08:45am	Breakfast		<i>Restaurant</i>
08:45am – 09:00am	Welcome & Pitches for the SIGs		<i>Blautopf</i>
09:00am – 10:00am	Keynote “The Self in Context: 25 Years of Advancing the Science of Self-Regulated Learning through Epistemic, Affective, and Motivational Lens” <i>by Krista Muis</i>		<i>Blautopf</i>
10:00am – 10:15am	Coffee	Individual Photo Shoots	<i>Foyer tba</i>
10:15am – 11:15am	Poster Fair (2)	Individual Photo Shoots	<i>Foyer tba</i>
11:15am – 12:15am	Special Interest Groups (1)		<i>Cf. attachment</i>
12:15pm – 01:15pm	Lunch with randomized seating order		<i>Restaurant</i>
01:20pm – 02:00pm	Social Walk		<i>Meeting Place: Foyer</i>
02:00pm – 02:10pm	Group Picture		<i>tba</i>
02:15pm – 03:15pm	Special Interest Groups (2)		<i>Cf. attachment</i>
03:15pm – 04:15pm	Poster Fair (3) with coffee		<i>Foyer</i>
04:15pm – 05:15pm	Keynote “New Frontiers in Educational Effectiveness Research: Investigating the Teaching Process In-Situ with VR, Machine Learning, and genAI” <i>by Yizhen (Eejain) Huang</i>		<i>Blautopf</i>
05:15am – 06:15pm	Poster Fair (4)		<i>Foyer</i>
06:15pm – 07:00pm	Dinner		<i>Restaurant</i>



07:15pm – 08:00pm	Social Gathering (open end)	<i>Restaurant/Bar</i>
	Internal project meeting AI + Education members	<i>Schöne Lau</i>
	Social Program “Crafting Macramé Key Chains” with Jana Boos	<i>Restaurant</i>
	Social Program ‘Just Dance’ Workout Session with Ida Malini Syvertsen	<i>Blautopf</i>
08:00pm – 09:00pm	Fireside Chat on Compatibility of Family and Research with Christina Artemenko and Walther Paravicini	<i>Kleine Grotte</i>



Friday, October 17th, 2025

Day 3

Time	Topic	Place
06:20am	Morning Run <i>with Wiebke Langer</i>	<i>Entrance of Tools Hotel</i>
07:00am – 08:45am	Breakfast & Check-Out	<i>Restaurant & Reception</i>
09:00am – 09:15am	Welcome	<i>Blautopf</i>
09:15am – 10:15am	Keynote “Curiosity-driven learning in humans: learning progress, autotelic exploration and open-ended development” <i>By Pierre-Yves Oudeyer</i>	<i>Blautopf</i>
10:20am – 11:20am	AI + Education Future Fund: Introduction and Poster Fair with Coffee	<i>Blautopf</i>
11:20am – 12:20pm	Discussion in Plenum	<i>Blautopf</i>
12:20pm – 12:30pm	Wrap-Up	<i>Blautopf</i>
12:30pm – 01:30pm	Lunch	<i>Restaurant</i>
01:30pm	Bus Departure to Tübingen	<i>Car Park</i>



Organisational Notes

Venue

Tagungszentrum Blaubeuren
Hessenhöfe 33
89143 Blaubeuren

LEAD Info Point

During the event, our **LEAD Info Point** located in the foyer will be open to answer any question and make your stay as comfortable as possible.

Rooms

Please check-in at the reception. **Check-in** time for the bedrooms is usually from **03:00pm**. **Check-out** time is before **09:00am** at the hotel reception. You can leave your **luggage in the entrance area or foyer**.

Hotel

Some participants will sleep at the [Tools Hotel](#) in Laichingen. All meals will be provided at the venue.

Wifi

Network: Technik
Password: nurfuertechniker2017

Seating Order

To provide an opportunity for you to get more familiar with all LEAD members, there will be a randomised seating order for **lunch on Wednesday and lunch on Thursday**. Please look for the place card with your name and enjoy an inspiring meal with your colleagues.

Beverages

Mineral water will be provided throughout the retreat. Coffee, tea and snacks will be provided during coffee breaks. We ask that you pay for all other drinks (especially during evening sessions) at the reception before you leave.

Travel Reimbursement

We kindly ask for your understanding that LEAD cannot pay a daily allowance (Tagegeld). The chartered bus and public transportation are the primary modes of transport. LEAD will reimburse your travel expenses (2nd class/economy). If your office is located in Tübingen, LEAD will not reimburse travel costs for other transportation (car, taxi etc.), except in justifiable cases.



Program Notes

Poster Fairs

For the poster fair, the PhD candidates prepare posters and present their PhD projects in 2-5 minutes to small groups of other LEAD members and guests. Everyone is invited to ask questions or make comments. Additionally, all new PhD candidates present their PhD projects. Everyone is invited to come and get to know them. These poster presentations replace the former Association Research Talks.

Keynote Speech

Distinguished national and international guests are invited to give a talk about keynote topics. Everyone attending the retreat and especially our PhD candidates should make use of the opportunity to interact with the guests during coffee breaks and social activities.

Special Interest Groups

The so called “Special Interest Groups” (SIGs) give everyone the opportunity to discuss an individual topic with a smaller group of people to give or receive feedback (e.g. new research projects; new research idea; third party funding or any other proposals).

Individual Photo Shoots

Need a new picture for your university website or other public outreach activities? Book an appointment with Rebecca by entering your name in [this online document](#).



Keynotes

Wednesday, October 15th, 2025

11:00am – 12:00 noon

The Psychology of Science Denial: Challenges and Solutions

Keynote by Gale Sinatra



How do individuals decide whether to get vaccinated, consume genetically modified foods, or vote to support climate change mitigation efforts in their neighborhood? Democracies depend on educated citizens who can make informed decisions about scientific issues. In *Science Denial: Why It Happens and What to Do About It*, Sinatra and co-author Barbara Hofer examine the factors contributing to science denial, doubt, and resistance. This presentation will focus on themes from the book including the role of psychological constructs such as misconceptions, cognitive biases, emotions, identity, epistemic cognition, and motivated reasoning as well as the challenges of science mistrust and possible solutions to promote greater science acceptance.

02:00pm – 02:45pm

Input Baden-Württemberg Stiftung by Theresia Bauer

04:00pm – 05:00pm

Learning Analytics: Responsible Use of Data

Keynote by Oleksandra Poquet



Educational technologies are becoming increasingly pervasive, collecting more data about learners than ever. Learning analytics is an applied research area focused on the use and analysis of heterogeneous data collected by educational technologies to inform and improve teaching and learning. In this talk, I introduce the field and situate it alongside the learning sciences, educational data mining, and AI in education. I then focus on two research challenges, i.e. ethics and evidence in learning analytics. To bring out the ethical issues, I will discuss our empirical work on learner privacy in data-rich learning environments. Then, I will reflect on using learning analytics as the means towards insights from moment-by-moment learner data at scale. These two aspects, ethics and evidence, emphasize the need to think of collecting and using learner data responsibly.



Thursday, October 16th, 2025

09:00am – 10:00am

The Self in Context: 25 Years of Advancing the Science of Self-Regulated Learning through Epistemic, Affective, and Motivational Lens

Keynote by Krista Muis



Over the past 25 years, research on self-regulated learning (SRL) has been significantly advanced through the integration of epistemic cognition, emotion, and motivation. This body of work has led to refinements in theoretical models of SRL by illuminating how learners' beliefs about knowledge and knowing shape their task definition, planning and goal setting, strategic regulation, and metacognitive monitoring. Simultaneously, it has emphasized the importance of emotions and motivational processes as integral components of regulation during learning. Empirical investigations have employed a range of methodologies—including mixed methods, think-aloud protocols, real-time emotion tracking, and digital trace data—to examine SRL as it unfolds in authentic academic settings.

Findings have demonstrated the complex and dynamic interactions among cognitive, emotional, and motivational processes, and how these interactions influence learning outcomes across diverse tasks and contexts.

This keynote will trace the evolution of these theoretical and empirical contributions, illustrating how they have reshaped contemporary understandings of SRL. It will also outline future directions for research and practice, with a focus on designing adaptive, learner-centered environments that support the regulation of cognition, emotion, and motivation. Collectively, this work underscores the necessity of a holistic approach to SRL—one that accounts not only for how learners act, but also how they think, feel, and what they believe.

04:15pm – 05:15pm

New Frontiers in Educational Effectiveness Research: Investigating the Teaching Process In-Situ with VR, Machine Learning, and genAI

Keynote by Yizhen (Eejain) Huang



This talk introduces a new approach to educational effectiveness research by examining classroom teaching in situ through virtual reality, machine learning, and generative AI. Inspired by the Wright brothers' testbed concept, it demonstrates how immersive simulations can isolate and analyze key teaching processes under realistic yet controlled conditions. Using multimodal data—eye tracking, motion tracking, physiological signals, and speech analysis—the studies reveal how classroom complexity, teacher movement, and adaptive feedback shape visual attention, stress, and dialogic behaviors. The results highlight how data-driven simulations enhance teacher learning and performance. By integrating testbed and field research, this talk outlines a cyclical model that links simulated insights to real classrooms, advancing

the scientific understanding of teaching and improving educational outcomes.



Friday, October 17th, 2025

09:15am – 10:15am

Curiosity-driven learning in humans: learning progress, autotelic exploration and open-ended development

Keynote by Pierre-Yves Oudeyer



A remarkable feat of children's development is their autonomy, open-endedness, flexibility and efficiency at learning diverse skills under strongly limited resources of time and energy. In this talk, Pierre-Yves Oudeyer will explain why and how curiosity mechanisms play a crucial role in such capabilities, leveraging computational models. He will discuss three theoretical perspectives: 1) the Learning Progress theory, its links with metacognition, how this accounts for selforganization of developmental structures, and how some of its predictions were confirmed in recent experimental paradigms with diverse populations; 2) Autotelic exploration, whereby

individuals invent, select and pursue their own goals; 3) Language as a cognitive tool to boost creative curiosity-driven autotelic exploration. Beyond providing insights on human development, he will also show how this sets the ground for new forms of open-ended AI systems. Finally, he will show several projects and experimental results in classrooms transposing these insights in educational interventions aimed to foster and train curiosity in children, e.g. training curious question-asking.



Wednesday, October 15th, 2025

New Members' Presentations

Name	Institution
Elissa Eilebrecht	PH Ludwigsburg
Ivo Bueno	TUM München
Ghada Hassan	Uni Tübingen
Puja Maharajan	Uni Tübingen
Luise Mehner	Uni Tübingen
Maristella Lunardon	Uni Tübingen
Felix Schreiber	Uni Tübingen
Martin Butz	Uni Tübingen
Anna Georg	Uni Tübingen
Hanna Gaspard	Uni Konstanz
Christina Michels	LEAD Scientific Coordination

Poster Fairs

Wednesday, October 15th, 2025

05:00pm – 06:00pm

Name	Title of Poster
Michelle Krause	ASPIRE - Künstliche Intelligenz und Selbstregulation im Schulkontext
Ghada Hassan	Cognitive Correlates of Computational Thinking in Gifted Children: A Preliminary Study
Valdemar A. Stenberdt	A Curious Ocean: Fostering primary school students' curiosity through technology-enhanced learning
Elissa Eilebrecht	Preparing Future Teachers for Science Education: Investigating and Fostering Preservice Teachers' Understanding of Science
Ivo Bueno	From Scoring to Teacher Feedback: NLP-based Teaching Quality Score Interpretability with SHAP Values
Luise Mehner	Supporting Collaborative Problem-Solving in Co-Located Learning Environments
Pedro Bastos	Sentiment Analysis and Predicting Student Engagement
Yidie Cheng	Cross-Linguistic Influence or Universal Patterns? Exploring morphosyntactic errors in L2 English Tense-Aspect: A Pilot Learner Corpus Study
Sarah Löber	Automatic item generation with GPT: comparing human-written and GPT-generated items
Puja Maharjan	tba

Thursday, October 16th, 2025

10:15am – 11:15am

Name	Title of Poster
Dan John	Mathematics Identity in Gifted Adolescents: Components and Outcomes
Fanyi Zeng	Exploring the Interplay Among Motivational Strategies, Digital Learning Behaviors, and Achievement Outcomes
Annika Mamat	Storytelling in presentations and its effect on speaker-audience relationship
Robin Wagner	Listening to Scientists in Videos: The Role of Immersion in Science learning
Elizabeth Bear	A Task-Based Conversational Agent Fosters Young Learners' Intercultural Communicative Competence: An RCT
Noel Wytopil	STEM Talent Selection: Effects of Including Creative Thinking on Gender Distribution and Group Composition
Katharina Leibfarth	Modeling Electricity: How Students Understand Simple Electric Circuits Through Different Models
Ting-Yu Liu	Listening Comprehension in Adaptive Language Learning within a VR Environment
Siling Guo	Skill Transfer in an Intensive Math Tutoring Randomized Controlled Trial
Kukka-Maaria Polso	Motivated Choices in Adolescence: Cross-Domain Dynamics Shaping Educational Pathways
Jana Boos	Perceived Utility Moderates Motivational Intervention Effects in Learning to Teach Responsibly with GenAI
María Paula Villabona	Every Move I Make: The Relationship between Metacognition and Motor Performance in Guitar Playing
Luca Heim	Who makes the Cut? (Relative) Age Effects in Identifying Gifted Students



Thursday, October 16th, 2025

03:15pm – 04:15pm

Name	Title of Poster
Lisa Marie König	Subject-Specific or Generic? The Three Basic Dimensions of Teaching Quality Across School Subjects
Sophia Richardon	How Teachers' Conceptualizations of Giftedness Shape Student Nomination for Gifted Services
Mats Abrahamse	Curiosity Under Strain: The Effects of Physical and Cognitive Effort on Information Seeking in Younger and Older Adults
Denise Löfflad	German Grammar Profile for Learners: Pedagogical Feature Definition and Automated Extraction
Gayatri Nerpagar	The mechanism behind the metacognitive access to multisensory information integration: A guitar based study
Lisa Monet	The Hessian error index - a data-supported study of school implementation, the impact on grades and on students' writing competence, linguistic self-concept and learning motivation
Linjia Zhang	Are Perceived Costs Subject-Specific? Comparing Math and English among Middle and High School Students
Katharina Fleig	The effect of keyword-based feedback on learning and metacognitive regulation
Nele Theuer	Wellbeing During the Transition from Secondary School to Post-Secondary Education
Leonie Gerster	The relevance of numeracy for financial literacy in adolescence - A meta-analysis and systematic review
Jaeyoon Choi	Does AI Read the Room or Lead the Room: Understanding Socio-Cognitive Dynamics of Human-AI Teaming
Katharina Totter	Learning History with Authentic Encounters: Insights from a Randomized Controlled Intervention Study
Eleni Kanli	Does the multilingual comparison of constructions facilitate learning? An analysis of the acquisition of the Spanish prepositions <i>a</i> and <i>de</i> after motion verbs through mono- and multilingual pedagogical construction grammar

Thursday, October 16th, 2025

05:15pm – 06:15pm

Name	Title of Poster
Vanessa Ivan	Comparing the Effects of AI-Generated and Teacher-Generated Interpolated Tests on Mind Wandering and Learning Outcomes
Marcel Capparozza	A Meta-analysis of Educative Curriculum Materials
Marei Beukman	How do Learning Engagement and Outcome Differ when Learning from Human vs. AI-Generated Instructors?
Nora Fröhlich	Do attitudes change during an intervention, and what makes school leaders decide to continue an intervention? Insights into a school development project.
Richard Schulte	Teaching with MatheBattle: An Adaptive Online Professional Development Course for Teachers <i>Course Design and Research Perspectives</i>
Myriel Kopatz	Class Composition and Student Outcomes: A Focus on Achievement and Interest
Ignatios Charalampidis	Enhancing Second Language Fluency through Readability-controllable Paraphrasing
Mihwa Lee	Engagement in Motion: Tracking Trajectories of Engagement in Digital L2 Reading
Katrin Kunz	Interplay of Computational Thinking, Code-tracing Ability, and Misconceptions
Xenia Stein	Learnings from Developing an Asynchronous Online Course for Children
Schools & Research Team (Ulli, Claudia & Julia)	Teaming up with LEAD „Schools & Research“
Luisa Ribeiro-Flucht	Practice Makes Procedural: Can AI Calibrate Usage-driven Practice to Strengthen Grammatical Connections?
Nora Fröhlich	Attitude Changes of school leaders, teachers, and parents and school leader's perspective on sustaining an intervention: insights into a school development project

Friday, October 17th, 2025

10:20am – 11:20am

Name	Title of Poster
AI@Schools	Empowering informatics teachers in AI through professional development
AI-LIT	AI-supported Literacy Development in Kindergarten for Educational Success, Equity and Social Participation – A Mobile App for Authentic Language Support in Early Education
ETQ-AI	Enhancing Teaching Quality with Artificial Intelligence
VOILA	Voice-operated intelligent learning assistant for gifted children
Immersive AI	An AI Dialogue Partner for Immersive Collaborative Learning
COMPASS	Comprehensive Open Math Platform with Adaptive Self-Regulation Support
Ethics	<i>Integrated Accompanying Research - Ethics</i> AI Chatbots in Education: Ethical Reflection
Rights	<i>Integrated Accompanying Research - Rights</i> Use of AI in Education: Fundamental Rights Perspectives under EU Law
Implementing Research-Based AI Innovations in Education	Challenges in implementing research-based AI innovations in education

Special Interest Groups

Thursday, October 16th, 2025

11:15am – 12:15am

Name	Title of SIG	Place
Thomas Dresler, Gorden Sudeck	Mental Health & Well-being	<i>Schöne Lau</i>
Nina Udvardi-Lakos, Till Fütterer	(What is) Self-regulation	<i>Kleine Grotte</i>
Kate Derkach	Developing evidence-based digital tools for language learning	<i>Blaufels</i>

02:15pm – 03:15pm

Name	Title of SIG	Place
Björn Rudzewitz, Mihwa Lee	Potentials and limits of log data analysis	<i>Schöne Lau</i>
Kook-Hee Gil	Linguistics research and language teaching	<i>Kleine Grotte</i>
Nia Nixon, Jaeyoon Choi, Pedro de Bastos	Human-AI Teaming	<i>Blaufels</i>