# EARLI 2025 — Program

## $MONDAY,\,25\,\,AUGUST\,\,2025$

Registrations	08:00-10:00			
Registrations				
Opening Ceremony	10:00-10:30	Location: Aula		
Opening Ceremony				
EARLI 40th Anniversary I	Panel 10:30–11:30	Location: Aula		
EARLI 40th Anniversary Panel				
Chair	Erik De Corte Founder of EARLI, Professor Emeritus (University of Leuven)			
Lucia Mason EARLI President (University of				
Padova)	Past President, 2015–2017 (University of Regensburg)			
Sanna Järvelä Past President, 2017–2019 (University of Oulu)				
	<b>Debra Myhill</b> Past President, 2019–2021 (University of Exeter)			
	<b>Eleni Kyza</b> Past President, 2021–2023 (Cyprus University of Technology)			

11:30-12:30	Location: Aula	
Tzipi Horowitz-Kraus		
Technion, Kennedy Krieger Institute, Israel		
Katharina Scheiter Leibniz-Institut für Wissensmedien / Eberhard Karls Universität Tübingen, Germany		
Christoph Helm		
Johannes Kepler Universität Linz, Austria		
	Tzipi Horowitz-Kraus Technion, Kennedy Krieger Institute, Israel Katharina Scheiter Leibniz-Institut für Wissensmedien / Eberhard Karls Universität Tübinge Christoph Helm	

Learning in Context Journal: Welcome and Information Meeting

12:45-14:15

Location: SR 11.06

Welcome and Information Meeting

Session A 01 12:45–14:15 Location: SR 15.44

## Interventions for Promoting Teacher Education

#### Chair

Ornit Spektor-Levy

Pre-service teachers' perceptions of their readiness to teach inclusively (Poster Presentation)

Tom Porta (Presenting Author); Joanna Anderson (Presenting Author)

Unlocking Learning Potential: Bridging Computational Thinking, Entrepreneurship, and Green Skills (Poster Presentation)

Bernadette Spieler (Presenting Author); Julia Lanz (Co-Author); Melanie Kieber (Co-Author); Harald Burgsteiner (Co-Author); Karl Kruusamäe (Co-Author); Sandra Tomeschek (Co-Author); Martin Kandlhofer (Co-Author)

Supporting Prospective Mathematics Teachers in Noticing Students' Proportional Reasoning (Poster Presentation)

Engin Ader (Presenting Author); Sinem Bas Ader (Co-Author); Didem Taylan (Co-Author)

Fostering Scientific Literacy and Science-Oriented Attitudes in Teacher Education (Poster Presentation)

Sabrina Bacher (Presenting Author); Claudia Schreiner (Co-Author); Christian Kraler (Co-Author); Surette Van Staden (Co-Author)

Supporting pre-service teachers in learning-cycle-based activities (Poster Presentation)

Katharina Engelmann (Presenting Author); Laura Schultze (Co-Author); Christof Wecker (Co-Author)

The Impact of a Theory Practice-Based Teacher Training on Student Teachers' Professional Competences (Poster Presentation)

Henrike Mentel (Presenting Author); Mareike Ehlert (Co-Author); Elmar Souvignier (Co-Author); Natalie Foerster (Co-Author)

## Session A 02 12:45–14:15 Location: SR 15.45

#### Vision, Context and Professional Development

#### Speaker

Eleftheria Gonida

Are We on Course? Navigating Teacher Professional Development With and About Digital Media. A Review (Poster Presentation)

Simon Munk (Presenting Author); Georgios Mitsostergios (Presenting Author); Lisa Ziernwald (Co-Author); Doris Holzberger (Co-Author)

Online primary EFL in Society 5.0: from a Taiwanese perspective (Poster Presentation)

MACHIKO KOBORI (Presenting Author)

Digitalisation of work: A systematic review (Poster Presentation)

Verena Pfeiffer (Presenting Author); Manuel Förster (Co-Author); Michael Goller (Co-Author)

Teachers' perception of their own learning-by-teaching opportunities (Poster Presentation)

Jesús Ribosa (Presenting Author); Yishan Lin (Co-Author); David Duran Gisbert (Co-Author); Binghai Sun (Co-Author)

Visualizing Feelings: Educational Data Science to Explore Teachers' Flourishing, and Belonging (Poster Presentation)

Martin Rehm (Presenting Author); Peter Bjorklund Jr. (Co-Author); Jennifer Karnopp (Co-Author)

Bridging the AI Competency Gap: Aligning Norway and China's Frameworks with UNESCO's Standards (Poster Presentation)

Han Han (Presenting Author); Fredrik Mørk Røkenes (Presenting Author)

Session A 03 12:45–14:15 Location: SR 15.43

#### Assessing and supporting competencies and interactions in educational settings

#### Chair

Christine van Nooijen

Assessing the psychometric properties of Neumann and Heredotou's rubric using the SELMA intervention (Poster Presentation)

Elif Turkyilmaz (Presenting Author); Ingunn Størksen (Presenting Author); Ksenia Solheim (Presenting Author)

Supporting Key Competencies in Visual Art Classes using an Empathy-Centred Approach (Poster Presentation)

Helen Arov (Presenting Author); Edna Vahter (Co-Author); Erika Löfström (Co-Author)

Daily Routine and Linguistic Sequences in a Public and a Private Preschool Classroom in Chile (Poster Presentation)

Paulina Pizarro (Presenting Author); Carla Varela (Co-Author)

Human-AI Partnership in Academic Research: A Case Study of Postgraduate Education Students (Poster Presentation)

Hai Min Dai (Presenting Author); Louis Major (Co-Author)

The effectiveness of unguided CSCL discussions in schools (Poster Presentation)

Ziv Lison (Presenting Author); Baruch Schwarz (Co-Author)

## Session A 04 12:45–14:15 Location: SR 15.42

## Learning in Younger and Older Students with and Without Language Difficulties

#### **Chair** Paul Ginns

Parents Plus: A Parent-Implemented Intervention for Preschool Children with Language Delays (Poster Presentation)

Brook Sawyer (Presenting Author); Carol Scheffner Hammer (Co-Author); Julie Smith (Co-Author); Annemarie Hindman (Co-Author); Julie Santoro (Co-Author); Joanna Hokenson (Co-Author); Eliza Gilden (Co-Author)

Young Children's Experiences with Pedagogical Short-Form Videos (Poster Presentation)

Janken C. Sæbø (Presenting Author); Silje Flesjå (Co-Author); Ingunn Størksen (Co-Author)

Effects of Kindergartener's Self-regulation on Behavioral Problems after a Large-scale Earthquake (Poster Presentation)

Noriko Yamamoto (Presenting Author); Kyoko Imai-Matsumura (Co-Author)

Children's experiences with a new SEL intervention for Early Childhood Education and Care (Poster Presentation)

svanaug lunde (Presenting Author); Ragnhild Lenes (Presenting Author); Ida Holth Mathiesen (Co-Author); Ingunn Størksen (Co-Author)

Teacher-child interactions in relation to 5-6-year-olds' self-regulation skills (Poster Presentation)

Tekla Seppälä (Presenting Author); Eija Pakarinen (Co-Author); Jenni Salminen (Co-Author); Niina Rutanen (Co-Author)

Working Memory and Chemistry Learning among Undergraduates with and without SLDs (Poster Presentation)

Francesca De Vita (Presenting Author); Antonella Maria Maggio (Co-Author); Barbara Sini (Co-Author); Elena Maria Ghibaudi (Co-Author); Renato Lombardo (Co-Author); Anna Maria Re (Co-Author)

## Session A 05 12:45–14:15 Location: SR 15.48

#### Reading and Writing Processes and Outcomes in Education

#### Chair

Senne Van Hoecke

Validating a holistic discussion model for educational decisions: barriers and opportunities (Poster Presentation)

Monique Dijks (Presenting Author); Anneke Dubbeld (Co-Author)

Orthographic knowledge in bilingual children (Poster Presentation)

Lukas Hauser (Presenting Author); Karin Landerl (Co-Author); Konstanze Edtstadler (Co-Author); Anna Steiner (Co-Author); Ferenc Kemény (Co-Author)

Algorithms and attention deficit: Comprehending a multimodal text material (Poster Presentation)

Tonje Stenseth (Presenting Author)

Written products and writing processes in deaf and hard of hearing children and their hearing peers (Poster Presentation)

Victoria Johansson (Presenting Author); Moa Gärdenfors (Co-Author)

The relationship between Chinese children's reading comprehension and writing ability. (Poster Presentation)

Yi Fan (Presenting Author); Barbara Arfé (Co-Author); Mengmeng Su (Co-Author); Wei Zhou (Co-Author)

Novice vs. Expert Raters Performance When Evaluating Integrated Writing Task: A Mixed-Methods Study (Poster Presentation)

Ximena Delgado-Osorio (Presenting Author); Valeriia Koval (Co-Author); Johannes Hartig (Co-Author); Claudia Harsch (Co-Author)

Session A 06 12:45–14:15 Location: HS 11.01

#### Generative AI goes to school: Instructional affordances and institutional implications

#### Chair

Roger Saljo

Discussant

Erno Lehtinen

## Organiser

Jimmy Jaldemark

Aligning with AI - Lexical Alignment Between Collaborative Learners and an AI Mediator (Single Paper)

Justin Edwards (Presenting Author); Márta Sobocinski (Co-Author); Joni Lämsä (Co-Author); Sanna Järvelä (Co-Author)

The Fiction Behind the Facts. Normativities of AI Policies and Guidelines in Higher Education (Single Paper)

Ylva Lindberg (Presenting Author); Anders Buch (Co-Author)

School Principals' Adoption of GenAI: Exploring Organizational Readiness (Single Paper)

Marcus Sundgren (Presenting Author); Susanne Sahlin (Co-Author); Rebecca Marrone (Co-Author); Maarten de Laat (Co-Author); Jimmy Jaldemark (Co-Author)

Teacher CoPilot: AI-based Training and Support System in Teacher Education (Single Paper)

Sabine Seufert (Presenting Author)

Generative AI goes to school: Instructional affordances and institutional implications (Invited Symposium)

## Session A 07 12:45–14:15 Location: HS 01.15

#### Growth Mindsets in Action: From Neural Processes to Educational Interventions

Chair

Silke Hertel; Yves Karlen

Discussant

Marko Lüftenegger

Does Growth-oriented Feedback Depend on Learners' Immigrant Backgrounds and Teachers' Mindsets? (Single Paper)

Helene Zeeb (Presenting Author); Thamar Voss (Co-Author); Inga Glogger-Frey (Co-Author)

Finnish Parents' Learning-related Mindsets and Parental Praise (Single Paper) Kirsi Tirri (Presenting Author); Ita Puusepp (Co-Author)

Shifting Perspectives: The Impact of a Digital Intervention on General and STEM-Specific Mindsets (Single Paper)

Yves Karlen (Presenting Author); Miriam Compagnoni (Co-Author); Maria-Luisa Schmitz (Co-Author); Bettina Wohlfender (University of Zurich)

Neurocognitive Correlates of Mindsets in Children: An EEG-Study (Single Paper) Vivien Rieder (Presenting Author); Madita Weißmann (Co-Author); Maren Stern (Co-Author); Leonie Köllbichler (Co-Author); Maya Adam (Co-Author); Torsten Wüstenberg (Co-Author); Yves Karlen (Co-Author); Silke Hertel (Co-Author)

Growth Mindsets in Action: From Neural Processes to Educational Interventions (Invited Symposium)

Session A 08 12:45–14:15 Location: HS 02.01

## Learning to teach for tomorrow? Preservice teachers' competencies for future teaching and learning

Chair

Mathias Dehne

Discussant

Robert Klassen

The teaching EVENTS model and teachers' varying modes of cognition for managing the classroom (Single Paper)

Charlotte Eliza Wolff (Presenting Author); Dorothy Duchatelet (Open Universiteit); Els Boshuizen (Open University of the Netherlands)

Learning to teach in practice? Student teachers' preferences and perceptions of adaptive mentoring (Single Paper)

Maria Hauswald (Presenting Author); Alexander Groeschner (Friedrich Schiller University Jena)

Supporting Pre-Service Primary Teacher Resilience and Well-being: Results from a Three-Wave Study (Single Paper)

Tina Hascher (Presenting Author); Julia Mori (Co-Author); Melanie Nuoffer (Co-Author); Isabelle Krummenacher (Co-Author); Irene Guidon (Co-Author); Anna Pavlova (Co-Author)

The Impact of VR on Preservice Teachers' Ability to Teach SRL: The Role of Points of View (Single Paper)

Tova Michalsky (Presenting Author)

Learning to teach for tomorrow? Preservice teachers' competencies for future teaching and learning (Invited Symposium)

## Session A 09 12:45–14:15 Location: HS 44.11

## Argumentation, dialogue and reasoning in critical thinking for source evaluation and decision making

#### Chair

Christa Asterhan; Freydis Vogel

Myside Bias on a Controversial Historical Event in a Dialogic Argumentative-Based Intervention (Single Paper)

Kalypso Iordanou (Presenting Author); Constantina Fotiou (Co-Author); Athina Maloni (Co-Author); Michalinos Zembylas (Co-Author)

Argumentation, dialogue and reasoning in critical thinking for source evaluation and decision making (Invited Symposium)

Generative AI in the classroom: prompting strategies, content integration and critical reflection (Single Paper)

Elisabeth Mayweg (Presenting Author); Ole Engel (Presenting Author)

Learning to Teach Critical Evaluation of Online Information: A Professional Program for Arab Teachers (Single Paper)

Shai Goldfarb Cohen (Presenting Author); Sarit Barzilai (Presenting Author); Thuraia Copti-Mshael (Co-Author); Linor Hadar (Co-Author); Liron Primor Greenfield (Co-Author)

Neither Lazy, nor biased? Lateral Reading Interventions Promote Analytical Source Investigation (Single Paper)

Marvin Fendt (Presenting Author); Benedikt Artmann (Co-Author); Christian Scheibenzuber (Co-Author); Peter Edelsbrunner (Co-Author)

## Session A 10 12:45–14:15 Location: HS 15.13

#### Education in Times of Populism and Polarization

#### Chair

Johanna Fee Ziemes

#### Discussant

Katrin Hahn-Laudenberg

Promoting Dissent in Teacher Education (Single Paper)

Koen Hoondert (Presenting Author); Larike Bronkhorst (Presenting Author); Milou Munsters (Co-Author); Bjorn Wansink (Co-Author)

Anti-Semitic Expressions in a Norwegian Lower Secondary Classroom (Single Paper) Lene Sirevåg (Presenting Author); Kristin Endresen-Maharaj (Co-Author); Aslaug Kristiansen (Co-Author)

Whose Civics? Reconsidering Political Subjectification and Socialization (Single Paper)

Aline Muff (Presenting Author); Aviv Cohen (Presenting Author)

Measuring Populism Among Adolescents: Results from ICCS 2022 (Single Paper) Johanna Fee Ziemes (Presenting Author); Katharina Eckstein (Co-Author)

Education in Times of Populism and Polarization (Invited Symposium)

#### Session A 11 12:45–14:15 Location: HS 15.05

#### The Gender Gap in Financial and Economic Literacy

Chair Taiga Brahm Discussant Exploring Gender Differences in Responding Financial Literacy Test Items (Single Paper)

Carmela Aprea (Presenting Author)

Nicole Ackermann

Exploring Gender Differences in Economic Graph Competence (Single Paper)

Malte Ring (Presenting Author); Volker Schoer (Co-Author)

Fearless Is Not Enough - Women Need To Be Competent and Confident (Single

Paper)

Bettina Greimel-Fuhrmann (Presenting Author)

The Gender Gap in Financial and Economic Literacy (Symposium)

The Gender Gap in Financial and Economic Literacy - Evidence from Germany (Single Paper)

Lucy Haag (Presenting Author); Luis Oberrauch (Co-Author); Taiga Brahm (Co-Author); Martin Biewen (Co-Author)

Session A 12 12:45–14:15 Location: HS 02.23

## Engagement, Identity and Academic Achievement

Chair

Kata Sebök

The Relationship Between Academic Achievement and Off-Task Social Media and Smartphone Usage (Single Paper)

Henrika Anttila (Presenting Author); Kirsi Pyhältö (Co-Author); Hanna Rekola (Co-Author)

Soft skills and academic outcomes: comparing students with and without Learning Disabilities (Single Paper)

Gerardo Pellegrino (Presenting Author); Tommaso Feraco (Co-Author); Chiara Meneghetti (Co-Author); Barbara Carretti (Co-Author)

How to support different writers: Effects of feedback on argumentative writing and motivation (Single Paper)

Katrin Peltzer (Presenting Author); Alina Lira Lorca (Co-Author); Ulrike-Marie Krause (Co-Author); Steve Graham (Co-Author); Vera Busse (Co-Author); Ernesto Panadero (Dublin City University)

How does assessment shape student identities? An integrative review (Single Paper) Juuso Henrik Nieminen (Presenting Author)

#### Session A 13 12:45–14:15 Location: HS 11.02

#### Task and Teaching Factors in Math and Science Learning

#### Chair

Alina Lira Lorca

Evaluating how task characteristics and response format drive the difficulty of percentage problems (Single Paper)

Eileen Richter (Presenting Author); Markus Wolfgang Hermann Spitzer (Co-Author)

Same content, different forms of teaching: Comparing learning-study designs in math and in science (Single Paper)

Ulf Ryberg (Co-Author); Jenny Svanteson Wester (Co-Author); Ahoo Shokraiefard (Göteborgs Universitet); Ake Ingerman (University of Gothenburg)

Embodied Learning in Early Mathematics: A Quasi-Experiment (Single Paper) Paul Ginns (Presenting Author); Katherin Cartwright (Co-Author); Jennifer Way (Co-Author)

Towards a taxonomy of concreteness and abstraction in mathematics education (Single Paper)

Julia Chatain (Presenting Author); Charlotte Müller (Co-Author); Keny Chatain (Co-Author); Leon Calabrese (Co-Author); Manu Kapur (Co-Author)

#### Session A 14 12:45–14:15 Location: HS 02.21

#### Effective approaches for promoting engagement, digital reading comprehension and self-regulation

#### Chair

Armin Fabian

Improving digital reading comprehension in secondary students: a long-term dynamic approach. (Single Paper)

Lidia Altamura García (Presenting Author); Pablo Delgado (Co-Author); Laura Gil Pelluch (Co-Author); Mario Romero (Co-Author); Marian Serrano-Mendizábal (Co-Author); Cristina Vargas Pecino (Co-Author); Ladislao Salmerón (Co-Author); Amelia Mañá (University of Valencia)

Goal Met or Time's Up? The Diminishing Criterion Model for Open-Ended Explanations (Single Paper)

Björn Mattes (Presenting Author); Justin Karkossa (Co-Author); Stephanie Pieschl (Co-Author)

The Role of Cognitive and Metacognitive Engagement for Lasting Learning (Single Paper)

Yoana Omarchevska (Presenting Author); Brendan Schuetze (Co-Author); Juliane Richter (Co-Author); Sascha Schanze (Co-Author); Nina Ulrich (Co-Author); Katharina Scheiter (Co-Author)

Enhancing Self-Regulated Learning in Primary Students: A Large-Scale Clustered RCT (Single Paper)

Samuel Fowler (Presenting Author); Benjamin Lam (Co-Author); Rebecca Marrone (Co-Author); Daniel Schunk (Co-Author); Kirsten Winkel (Co-Author); Henning Hermes (Co-Author); Sally Brinkman (Co-Author); Florence Gabriel (University of South Australia); Shane Dawson (University of South Australia)

#### Session A 15 12:45–14:15 Location: HS 11.03

## Instructional Practices and Contexts in Elementary School

#### Chair

Duygu Savaşcı-Smith

First graders' self-reported socioemotional well-being: Groups of belongingness and disconnectedness (Single Paper)

Anne-Elina Salo (Presenting Author); Anna Holvio (Co-Author); Silja Martikainen (Co-Author); Katja Upadyaya (Co-Author); Mimmu Sulkanen (Co-Author); Mirjam Kalland (Co-Author); Katariina Salmela-Aro (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author)

Intervention to improve classroom behavioural climate (Single Paper)

Pilvi Peura (Presenting Author); Heidi Korpipää (Co-Author); Vesa Närhi (Co-Author); Hannu Savolainen (Co-Author); Tuija Aro (Co-Author); Tuire Koponen (Co-Author); Valtteri Eskola (Co-Author); Emmi Pelkonen (Co-Author); Mika Paananen (Co-Author); Mika Aro (Co-Author)

Gendered Motivational Trajectories and Dimensional Comparison Processes across Primary School Years (Single Paper)

Heta Tuominen (Co-Author); Markku Niemivirta (Co-Author); Anna Widlund (Åbo Akademi University); Johan Korhonen (Åbo Akademi University)

Examining Authorial Agency in Elementary Children's Narratives (Single Paper) Maryam Khosronejad (Presenting Author); Mary Ryan (Co-Author)

Session A 16 12:45–14:15 Location: HS 15.03

## AI Applications and Games in Learning

#### Chair

Patrick Albus

Using Game Maps to Enhance Learning Navigation: Engaging Design Techniques for Higher Education (Demo Session)

Jingyang Ai (Presenting Author); Suijing Yang (Presenting Author)

Using AI Conversational Agents to Support Student Scientific Inquiry in Gamebased Learning (Demo Session)

Megan Humburg (Presenting Author); Daeun Hong (Co-Author); Tianshu Wang (Co-Author); Mengxi Zhou (Co-Author); Chen Feng (Co-Author); Joshua Danish (Co-Author); Cindy Hmelo-Silver (Co-Author); Krista Glazewski (Co-Author); Yeo Jin Kim (Co-Author); Vikram Kumaran (Co-Author); James Lester (Co-Author)

Generative AI in Education: A Workshop Concept for Fostering Creative Environments (Demo Session)

Charlotte Axelsson (Presenting Author); Tanja Habermeyer (Co-Author); Marcial Koch (Co-Author)

Session A 17 12:45–14:15 Location: HS 12.01

## Advanced Tools for Teaching, Feedback and Self-regulated Learning

Chair

Ana Luísa Costa

FLoRA - An Adaptive Tool to Support Self-Regulated Learning (Demo Session)

XINYU LI (Presenting Author); TONGGUANG LI (Co-Author); Linxuan Zhao (Co-Author); Mladen Raković (Co-Author); Dragan Gasevic (Co-Author); Yizhou Fan (Co-Author)

PolyFeed: Enhancing two-way feedback processes with feedback analytics (Demo Session)

Yi-Shan Tsai (Presenting Author); Bhagya Maheshi (Co-Author); Flora Jin (Co-Author); Hiruni Palihena (Co-Author); Dragan Gasevic (Co-Author)

Vector Bytes - Investigating the use of Virtual Reality for STEM teaching. (Demo Session)

Christopher Cleveland (Presenting Author); Ania Majewska (Co-Author); Michael Yabsley (Co-Author)

Session A 18 12:45–14:15 Location: Festsaal

#### Methods for Supporting Learners and Teachers

Chair

Minkang Kim

Fostering math school readiness – digital training and screening of preschoolers' basic maths skills (Demo Session)

Nurit Viesel-Nordmeyer (Presenting Author); Joerg-Tobias Kuhn (Co-Author)

Integrating multiple research paradigms: Mixed methods to investigate teacher and learner practices (Demo Session)

Shirley Agostinho (Presenting Author); Lori Lockyer (Co-Author); Sue Bennett (Co-Author)

Pragmatic Adaptive Modelling: a context-specific methodology for enacting Long-Term Change (Demo Session)

Deborah Devis (Presenting Author); Simon Leonard (Co-Author)

Session A 19 12:45–14:15 Location: HS 15.14

#### Self-regulation in Learning and Affect

Chair

Tanja Bross

Mapping Regulatory Routines in Mathematical Discourse with the Discourse Mapping Diagram (Demo Session)

Einat Heyd-Metzuyanim (Presenting Author); Michal Tabach (Co-Author); Avital Elbaum-Cohen (Co-Author)

Emotional Abuse Experience and Adolescent Internet Addiction: A Moderated Mediation Model (Demo Session)

Weiyi Xie (Presenting Author); Xiaoyuan Han (Co-Author); Clifton Emery (Co-Author)

Self-Regulated Learning-based Instruction (Demo Session)

Nurdeniz Yılmaz (Presenting Author); Büşra ÇELİK (Co-Author)

Session A 20	12:45-14:15	Location: HS 25.11
AI and Gamification		
Chair Luisa Frede	Can Gamification Help Us Recruit More Teachers? (Demo S Rebecca Snell (Presenting Author); Robert Klassen (Co-Author)	Session)
	Presenting Lara: An AI Chatbot for Supporting Game-Based Entrepreneurial Learning (Demo Session) Anna Wenzel (Presenting Author); Andreas Liening (Co-Author)	
	Teachable machine and social media emulator Somekone - t learn about AI (Demo Session) Jari Laru (Presenting Author); Kati Mäkitalo (Co-Author); Megumi Merikanto-Tolonen (Co-Author); Ismail Celik (Co-Author)	

Session A 21	12:45	-14:15	Location: HS 15.02	
Student Experiences in Divers Learning Contexts				
<b>Chair</b> Marije van Amels	svoort lecture-based learning (Sing	autonomy, competence and gle Paper) ing Author); Petri Nokelainen (Co	••	

University Students' Perceptions of Classroom Physical Activity Breaks: A Qualitative Study (Single Paper)
Giuseppe Ritella (Presenting Author); Federica Andricciola (Co-Author); Patrizia Oliva (Co-

Giuseppe Ritella (Presenting Author); Federica Andricciola (Co-Author); Patrizia Oliva (Co-Author)

Envy in the Classroom: Environmental Antecedents and Student Outcomes  $({\rm Single\ Paper})$ 

Flora Fassl (Presenting Author); Maximilian Hofleitner (Co-Author); Marko Lüftenegger (Co-Author)

Leveraging Student Assets for Integrated STEM Learning: A Design-Based Research Approach (Single Paper)

Ian Thacker (Presenting Author); Danette Martinez (Co-Author)

Session B 01 14:30–16:00 Location: SR 15.48

#### Supporting Engagement and Self-Regulation in Learning Processes

#### Chair

Anna Gorbunova

Production practices in youth digital media production in and outside educational contexts (Poster Presentation)

Hanna Huber (Presenting Author)

The interplay of social interaction processes and group-level regulation in collaborative learning (Poster Presentation)

Eija Vuorenmaa (Presenting Author); Sanna Järvelä (Co-Author); Hanna Jarvenoja (Co-Author)

Building Pedagogical Digital Competence in Teacher Education: Role of SRL and Motivational Beliefs (Poster Presentation)

Sara Ahola (Presenting Author); Kateryna Zabolotna (Co-Author); Emma Lehtoaho (Co-Author); Hanna Jarvenoja (Co-Author)

How adaptive metacognitive prompts to support secondary students' self-regulated learning processes (Poster Presentation)

Olli Aksela (Presenting Author); Joni Lämsä (Co-Author); Sanna Järvelä (Co-Author)

A systematic review about the relationship between Achievement Goals and Self-Regulated Learning (Poster Presentation)

CHRISTINA SMAROPOULOU (Presenting Author); AIKATERINI VASIOU (University of Crete)

Gamification's Trials and Tribulations: The overriding power of a story to boost learning engagement (Poster Presentation)

Armanda Pereira (Presenting Author); Sara Teixeira (Co-Author); Sofia Vidal (Co-Author); Sandra Mesquita (Co-Author); Tânia Moreira (Co-Author); Julia Högemann (Co-Author); Pedro Rosário (Co-Author)

Session B 02 14:30–16:00 Location: LS 15.03

#### Beliefs, Understanding and Competence in Student Teachers and Adults

#### Chair

Brook Sawyer

Student teachers' self-efficacy beliefs in realizing language stimulating interactions in preschool (Roundtable)

Thibaut Duthois (Presenting Author); Ruben Vanderlinde (Co-Author); Maribel Montero Perez (Co-Author)

Evolving Understandings of Dialogic Teaching: A Comparative and Temporal Study of Teacher Educators (Roundtable)

Benzi Slakmon (Presenting Author); Ronit Shiran (Co-Author); Hadas Huber (Co-Author); Anat Abramovich (Co-Author)

PLAY SERIOUS ACT MORAL Fostering ethical competence through serious moral gaming in nursing-EthiCare (Roundtable)

Tamara Großbichler (Presenting Author); Elisabeth Kupka-Klepsch (Co-Author); Leon Freudenthaler (Co-Author)

Session B 03 14:30–16:00 Location: SR 15.13

## Professional Development in Adults

**Chair** Vera Hilger Differentiated instruction: beliefs and practices in a secondary school (Roundtable) Berber Langelaan (Presenting Author); Wouter Smets (Co-Author); Izaak Dekker (Co-Author); Lisa Gaikhorst (Co-Author)

Estimating Toddlers' Risk Competence: Professionals and Parents Reflecting On Risky Situation Videos (Roundtable)

Helena Sienaert (Presenting Author)

Top-Down vs. Bottom-Up: Navigating Effective Approaches to Professional Learning (Roundtable)

Samuel Fowler (Presenting Author); Deborah Devis (Co-Author); Simon Leonard (Co-Author)

## Teachers Charactersitics and Perspective at Different Career Stages

Chair

Servet Altan

First- versus second-career teachers: Comparing personality, motivation, and teaching success (Poster Presentation)

Barbara Weissenbacher (Presenting Author)

Teacher's Perspectives on High-Leverage Practices and Wordless Texts in Inclusive Classrooms (Poster Presentation)

Sabrina Gerth (Presenting Author); Lefki Kourea (Co-Author); Cristina Dumitru (Co-Author); Fotini Lytra (Co-Author); Maria Magdalena Stan (Co-Author); Maria Vrikki (Co-Author)

Early career teachers' professional agency in the professional community and working environment fit (Poster Presentation)

Liyuan E (Presenting Author); Jenni Sullanmaa (Co-Author); Auli Toom (Co-Author); Kirsi Pyhältö (Co-Author)

How is understanding of neuroplasticity manifested in Finnish teachers' pedagogical thinking? (Poster Presentation)

Sonja Laine (Presenting Author); Kati Jääskö-Santala (Co-Author); Kirsi Tirri (Co-Author)

Inclusive Education in Language Teaching: Self-Efficacy, Attitudes Across Five European Countries (Poster Presentation)

Nur Akkus Cakir (Presenting Author); Irem Cakar (Co-Author); Oya Taneri (Co-Author)

Session B 05 14:30–16:00 Location: SR 15.33

## Brokering and Evaluating Perspectives in Higher Education and Beyond

Chair

Isabel Raemdonck

Critical Source Evaluation in Higher Education Teachers (Roundtable)

Leila Ferguson (Presenting Author); Anette Andresen (Co-Author); Thea Kanstad Heimdal (Co-Author); Gro Skåland (Co-Author)

Comparing effects of three short in-class trainings on first-year study success in higher education (Roundtable)

Joram van Ketel (Presenting Author); Max van Lent (Co-Author); Arjen de Vetten (Co-Author)

Brokering the scattered perspectives on brokerage in complex public issues (Roundtable)

Marjoleine Heijboer (Presenting Author); Mayke Vereijken (Co-Author); Larike Bronkhorst (Co-Author)

## Session B 06 14:30–16:00 Location: SR 15.34

#### AI Applications, Perceptions and Use

#### Chair

Agnese Nanni

ChatGPT and Children: Developing Instruments to Assess Children's Knowledge, Usage, and Attitudes. (Roundtable)

Sarah Malone (Presenting Author); Dominik Thüs (Co-Author); Kristin Altmeyer (Co-Author); Marina Dombrovskaia (Co-Author); Carmen Köhler (Co-Author); Johannes Hartig (Co-Author)

Beyond AI tutoring: AI multimedia conversations vs. videos and texts in primary education (Roundtable)

Mikko Haavisto (Presenting Author)

A Web-Based Application with Artificial Intelligence for Improving Reading and Writing Skills  $({\rm Roundtable})$ 

Marisol Cueli (Presenting Author); Rebeca Cerezo (Co-Author); Miguel García-Suárez (Co-Author); Paloma Gonzalez-Castro (Co-Author)

Session B 07 14:30–16:00 Location: SR 15.32

#### Promoting motivation and strategy use

#### Speaker

Salome Wagner

Promoting Self-Regulated Learning with Learning Diaries: Prerequisites and Conditions for Success (Roundtable)

Thomas Martens (Presenting Author); Christian Weissert (Co-Author)

Promoting effective cognitive learning strategies via a motivational intervention (Roundtable)

Madison Graham (Presenting Author); Peter Verkoeijen (Co-Author); Marloes Broeren (Co-Author); Arends Lidia (Co-Author); Guus Smeets (Co-Author)

Prompting understanding-orientated epistemic aims to increase utility value of educational sciences? (Roundtable)

Michael Rochnia (Presenting Author); Ricarda Rübben (Co-Author)

Session B 08 14:30–16:00 Location: SR 15.15

## Cognitive Processes and Outcomes in Learning

#### Chair

Kerstin Helker

Expertise-related differences in perception: An eye-tracking study on teacher-parent talks (Roundtable)

Kristina Ackel-Eisnach (Presenting Author); Inga Wagner (Co-Author); Ilona Weyrauch (Co-Author); Josef Strasser (Co-Author)

 $\textbf{Long-Term Memory Mechanisms In Math Development} \hspace{0.1cm} (\textbf{Roundtable})$ 

Cynthia Fioriti (Presenting Author); Analia Marzoratti (Co-Author); Tanya Evans (Co-Author); Ian Lyons (Co-Author)

Fostering text comprehension through engagment on paper, on screen and with creativity (Roundtable)

Marco Bartolucci (Co-Author); Chiara Bertolini (Co-Author); Debora Catania (Co-Author); Agnese Vezzani (University of Modena and Reggio Emilia - Department of Education and Human Sciences)

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#### Motivation and Affect in Teachers and Students

#### Chair

Eva Lindgren

The role of teacher support, expectancies and values in adolescents' intentions to study mathematics (Poster Presentation)

Erin Mackenzie (Presenting Author); Kathryn Holmes (Co-Author); Nathan Berger (Co-Author)

Promoting Academic Motivation and Well-being by Training Early Adolescents in Need Crafting (Poster Presentation)

Daphne van den Bogaard (Presenting Author); Maarten Vansteenkiste (Co-Author); Bart Soenens (Co-Author)

Students' Views of Teachers' Classroom Management in PE: Links with Affective-Motivational Outcomes (Poster Presentation)

Tim Haigis (Presenting Author); Christin Lotz (Co-Author); Anne Deiglmayr (Co-Author)

Motivational structure of future teachers (Poster Presentation)

Martina Faltová (Presenting Author)

Boosting Performance through Utility-Value Intervention: The Role of Academic Self-Concept (Poster Presentation)

Laura Marie Leipert (Presenting Author); Clara Marie Mumme (Co-Author); Regina Vollmeyer (Co-Author)

Achievement goal orientations and grades: comparing students choosing general vs. vocational tracks (Poster Presentation)

Kukka-Maaria Polso (Presenting Author); Heta Tuominen (Co-Author); Hans Lehikoinen (Co-Author); Petri Ihantola (Co-Author); Markku Niemivirta (Co-Author)

Session B 10 14:30–16:00 Location: HS 15.12

## Individual differences in developing early problem-solving competencies across STEM domains

## Chair

Joke Torbeyns

#### Discussant

Laura Outhwaite

## Organiser

Joris Van Elsen

Identifying individual differences in problem solving in preschoolers (Single Paper) Joris Van Elsen (Presenting Author); Joke Torbeyns (Co-Author); Sven De Maeyer (Co-Author)

Effects of a collaboration intervention on STEM problem-solving in primary education (Single Paper)

Jonas Schäfer (Presenting Author); Timo Reuter (Co-Author); Lukas Lazzara (Co-Author); Miriam Leuchter (Co-Author)

Early academic predictors of mathematical problem-solving in South African preschoolers (Single Paper)  $\,$ 

Kathleen Fonseca (Presenting Author); Anssi Vanhala (Co-Author); Johan Korhonen (Co-Author); Anu Laine (Co-Author); Pirjo Aunio (Co-Author)

Early development of language skills, executive functions and mathematical problem-solving (Single Paper)

Anssi Vanhala (Presenting Author); Anna Widlund (Co-Author); Johan Korhonen (Co-Author); Pirjo Aunio (Co-Author)

Individual differences in developing early problem-solving competencies across STEM domains (Invited Symposium)

Session B 11 14:30–16:00 Location: HS 25.11

## Utilizing Multimodal Data to Examine Motivation and Emotion in Achievement Situations

#### Chair

Hanna Gaspard; Martin Daumiller

#### Discussant

Kou Murayama

Team Leaders' Emotions and Clinical Decision-Making in High-Stress Medical Simulations (Single Paper)

Roger Azevedo (Presenting Author); Annamaria Brosnihan (Co-Author); Matthew Moreno (Co-Author); Megan Wiedbusch (Co-Author); Shiva Kalidindi (Co-Author); Robert Smith (Co-Author); Tara Delegado (Co-Author); Cameron Marano (Co-Author); Milouni Patel (Co-Author)

Utilizing Multimodal Methods to Study Socially Shared Regulation's Impact on Motivation and Emotion (Single Paper)

Hanna Jarvenoja (Presenting Author); Tiina Törmänen (Co-Author); Sanna Järvelä (Co-Author)

Profiles of Learners' Motivations and Implications for their Motivated Behavior and Achievement (Single Paper)

Jeff Greene (Presenting Author); Robert Plumley (Co-Author); Matthew Bernacki (Co-Author)

What Can Physiological Measures Reveal about Emotion and Motivation in an Achievement Situation? (Single Paper)

Miriam Wünsch (Presenting Author); Franziska Eckerskorn (Presenting Author); Ji-Young Min (Co-Author); Anne Christiane Frenzel (Co-Author)

Utilizing Multimodal Data to Examine Motivation and Emotion in Achievement Situations (Invited Symposium)

Session B 12 14:30–16:00 Location: HS 15.14

## Analyzing classroom interactions: Showcasing methodological approaches

#### Chair

Mavra Mascareño Lara

### Discussant

Giulia Messina Dahlberg

Uncovering real-time dynamics of verbal classroom interactions with the Relational Event Model (Single Paper)

Nienke Smit (Presenting Author); Nina van Graafeiland (Co-Author); Daniel Oberski (Co-Author); Jan van Tartwijk (Co-Author); Mahdi Shafiee Kamalabad (Co-Author)

Using State Space Grids for Visualising and Analysing Teacher-Student Interaction in an Intervention (Single Paper)

Linda Hendriks (Presenting Author); Elisa Kupers (Co-Author); Henderien Steenbeek (Co-Author); Ever Bisschop Boele (Co-Author); Paul van Geert (Co-Author)

Worlds negotiated through talk: A Discourse Genre analysis of Classroom conversations (Single Paper)

Ofri Wagner Lebel (Presenting Author); Gideon Dishon (Co-Author)

A Conversation Analysis of Classroom Interactions: The Interactional Management of Explanations (Single Paper)

Myrte Gosen (Presenting Author); Annerose Willemsen (Co-Author); Frans Hiddink (Co-Author)

Analyzing classroom interactions: Showcasing methodological approaches (Invited Symposium)

Session B 13 14:30-16:00 Location: HS 46.01

Comprehension processes in learning from text and graphics: Similarities and differences

Chair

Jean-Michel Boucheix

Discussant

Katharina Scheiter

Organiser

Richard Lowe

Processing explanatory text versus explanatory graphics: strategies and processes (Single Paper)

Richard Lowe (Presenting Author); Jean-Michel Boucheix (Co-Author)

Design effective instructional Graphics for understanding dynamic systems (Single

Mireille Bétrancourt (Presenting Author)

Distinction and commonalities of comprehension processes across texts and graph-

ics (Single Paper)

Jean-François Rouet (Presenting Author)

Can Text and Graphics Comprehension Be Married Happily? (Single Paper)

Wolfgang Schnotz (Presenting Author)

Comprehension processes in learning from text and graphics: Similarities and dif-

ferences (Invited Symposium)

Session B 14 14:30-16:00 Location: HS 11.02

Religious Identities and Sense of Belonging: Their Relevance for Future Citizenship Education

Discussant

Martin Ubani

Human rights, democracy and politics in the school subject of Religious Education.

(Single Paper)

Manfred L. Pirner (Presenting Author)

Spontaneous controversial statements in the classroom – lost educational moments

(Single Paper)

Lene Sirevåg (Presenting Author)

Negotiating citizenship and belonging in Finnish schools: minority teachers as cul-

tural brokers (Single Paper)

Inkeri Rissanen (Presenting Author); Niina Putkonen (Co-Author); Maija Yli-Jokipii (Co-Author)

Intersecting Paths: Religion, Citizenship, and the Construction of Belonging in Education (Single Paper)

Alexander Unser (TU Dortmund University)

Religious Identities and Sense of Belonging: Their Relevance for Future Citizen-

ship Education (Invited Symposium)

Session B 15 14:30–16:00 Location: HS 44.11

Learning is in the making: Special issues in Learning and Instruction

Chair

Nora McIntyre

Discussants

K. Ann Renninger; Rebecca Collie; Suzanne E. Hidi; Tina Hascher; Kevin Ackermans;

Anselm Strohmaier

Organiser

Gert Rijlaarsdam

The role of rewards and competition in education

Suzanne E. Hidi, K. Ann Renninger

The chronicles of cognition: Think-aloud and its potential in research on learning and instruction

Nora McIntyre

Student Well-Being: Advancing Knowledge of the Construct and the Role of Learning and Teaching Factors

Rebecca Collie, Tina Hascher

Contemporary approaches to optimize the design of educational videos

Kevin Ackermans

Adaptive support for Learning and Instruction; Using Real-Time Process Data of

Domain-Specific Learning Processes

Anselm Strohmaier

Session B 16 14:30–16:00 Location: HS 15.06

Programs and Tools for Promoting Motivation, Learning, and Worldviews

Chair

Ka Lok Cheng

Educational Agricultural Farm Program - Preschoolers' Agricultural and Environ-

mental Literacy (Roundtable)

Ornit Spektor-Levy (Presenting Author); Moshe Castoriano (Co-Author)

Worldviews and sustainabilities. A study on Finnish youth (Roundtable)

Martin Ubani (Presenting Author)

Use of immersive experiences to increase interest in biodiversity in informal learn-

ing settings (Roundtable)

Ulrika Ferner (Presenting Author); Birgit Brucker (Co-Author); Marc Halfmann (Co-Author);

Peter Gerjets (Co-Author)

Session B 17 14:30–16:00 Location: SR 15.42

## Lifelong learning, empowerment and innovation: Reimagining education across contexts

#### Chair

Stefanie Chye

How to successfully empower women in AI startups – Gender differences in knowledge and self-efficacy (Poster Presentation)

Jule Hangen (Presenting Author); Vinzent Weber (Presenting Author); Eveline Wuttke (Presenting Author)

The Role of the Home environment in Children's Cognitive Experiences and Need for Cognition (Poster Presentation)

Evelien Aerts (Presenting Author); Jeroen Lavrijsen (Co-Author); Karine Verschueren (Co-Author); Franzis Preckel (Co-Author)

An integrative and dynamic perspective on participation in Lifelong learning (Poster Presentation)

Fatemeh Janesarvatan (Presenting Author); Marijn Wijga (Co-Author); Eva Kyndt (Co-Author); Simon Beausaert (Co-Author)

Examining Workplace Affordances and Learner Engagement for Developing Occupational Subjectivity (Poster Presentation)

Shien Chue (Presenting Author); Stephen Billett (Co-Author); Annabel Chen (Co-Author)

What does innovative capacity of teams mean in the context of higher educational change? (Poster Presentation)

Idwer Doosje (Presenting Author); Simon Beausaert (Co-Author); Kirstin van Lommel (Co-Author); mieke koeslag-kreunen (Co-Author)

Evaluation of a Digital Toolbox for Enhanced Ability, Motivation, and Desire for Lifelong Learning (Poster Presentation)

Elisabeth Åström (Presenting Author); Daniel Sörman (Co-Author); Patrik Sörqvist (Co-Author); Mikael Ahlström (Co-Author); Jessica Korning Ljungberg (Co-Author)

Session B 18 14:30–16:00 Location: HS 15.04

#### Multiversalizing Epistemologies for a Qualitatively Robust Educational Sciences

## Chair

Sangeeta Bagga-Gupta

#### Discussant

Antti Rajala; Nina Bonderup

Dohn; Roger Saljo

#### Organiser

Giulia Messina Dahlberg

Towards Decolonizing French Language Education: Examples from Scotland and British Columbia (Single Paper)

Bullock Cecile (Presenting Author); Florence Bonacina-Pugh (Co-Author)

Multiversalizing Epistemologies for a Qualitatively Robust Educational Sciences (Invited Symposium)

The Premises and Promises of Diversity-Sensitive Education Beyond Boundaries (Single Paper)

Giulia Messina Dahlberg (Presenting Author); Barbara Gross (Co-Author)

Pluriversal Literacies: A Perspective and Practice for Sustainable and Anticolonial Futures (Single Paper)

Mia Perry (Presenting Author); Lisa Bradley (Presenting Author)

Activist Education, (in)securitization, and Colonialism: A Situated Perspective of Unlearning (Single Paper)

Daniel Silva (Presenting Author)

Disrupting Academic Genres: Promoting Inclusion in Publishing and Pedagogy (Single Paper)

Anders Björkvall (Presenting Author); Arlene Archer (Presenting Author)

Coffee Break 16:00–16:30

Coffee Break

Session C 01 16:30–18:00 Location: LS 15.03

## Teacher Teaching and Design at Different Grade Levels

#### Chair

Nathalie Bick

Impact of Lesson Study on Teachers' Dispositions toward Reading in Prevocational Education (Roundtable)

Soetkin Werbrouck (Presenting Author); Hilde Van Keer (Co-Author)

Searching common language in disciplinary literacy: sensemaking of a teacher design team (Roundtable)

J.P. van Drie (Presenting Author); Loes de Jong (Co-Author)

Improving University Inclusive Teaching with Immersive Virtual Reality and Online Training (Roundtable)

Antonella Ferrara (Presenting Author); Clement Desoche (Co-Author); Valentin Clement (Co-Author); Anna Clavel (Co-Author); Yulia Leborgne (Co-Author); Stéphanie Mazza (Co-Author); Alice Gomez (Université Claude Bernard Lyon 1); Amandine Rey (Université Claude Bernard Lyon 1)

Session C 02 16:30–18:00 Location: SR 15.43

#### Teachers' and Students' Wellbeing

#### Chair

Martin Rehm

Rethinking notions of agency in relation to research co-creation: tensions at the chalk-face (Poster Presentation)

Carrie Adamson (Presenting Author); Jeremy Oldfield (Co-Author); Steph Ainsworth (Co-Author)

Associations between teachers' and school principals' social capital and occupational wellbeing (Poster Presentation)

Jukka Mäkinen (Presenting Author); Katja Upadyaya (Co-Author); Katariina Salmela-Aro (Co-Author)

Psychological Flexibility-Based Interventions for Teacher Well-Being: A Systematic Review (Poster Presentation)

Ella Kämper (Presenting Author); Henna Asikainen (Co-Author); Nina Katajavuori (Co-Author); Veera Lampinen (Co-Author)

School Leadership Quality and Teachers' Job Satisfaction: A Job Demands-Resources Perspective (Poster Presentation)

Kateřina Machovcová (Presenting Author); Jiří Mudrák (Co-Author); Kateřina Zábrodská (Co-Author)

Supporting Children of Mentally Ill Parents in the Education System: A Lifeworld-Oriented Approach (Poster Presentation)

Tonina Liriel AUREL (Presenting Author)

Through the Lens of Wellbeing: Unpacking How Mental Health Shapes Perceptions of Teaching Quality (Poster Presentation)

Franziska Greiner (Presenting Author); Anna-Lina Rauschenbach (Co-Author); Eva Baumann (Co-Author); Julian Schmitz (Co-Author); Henrik Saalbach (Co-Author); Alexander Bergmann-Gering (University Leipzig)

Session C 03 16:30–18:00 Location: SR 15.48

#### Shaping beliefs and attitudes in a changing educational landscape

#### Chair

Natalia Avila Reyes

Navigating the GenAI Era: How QS Top 50 Universities are Responding to GenAI in Higher Educatio (Poster Presentation)

Suixin Sui (Presenting Author); Xinyi Sui (Co-Author)

Debunking learning myths: Transforming scientific papers into videos. (Poster Presentation)

Inmaculada Fajardo (Presenting Author); Marian Serrano-Mendizábal (Co-Author); Antonio Ferrer (Co-Author); Ignacio Máñez (Co-Author); Javier Roca (Co-Author); Ávila Vicenta (Co-Author); Nadina Gómez-Merino (Co-Author)

Student Perspectives on Learning Analytics Dashboards: A Cross-Program and Country Analysis (Poster Presentation)

Michael Eichhorn (Presenting Author); Dora Brauneger (Co-Author); Blaženka Divjak (Co-Author); Slavica Sović (Co-Author); Barbi Svetec (Co-Author); Mirza Žižak (Co-Author); Alexander Tillmann (Goethe-Universität Frankfurt)

Perceptions of Giftedness among University Teachers: the case of Spain (Poster Presentation)

Tania Pasarín-Lavín (Presenting Author); Paloma Merello (Co-Author); Trinidad Garcia (Co-Author); Celestino Rodríguez (Co-Author)

The Cultural Framing of Giftedness and Its Place in Educator Professional Development (Poster Presentation)

Daniel Patrick Balestrini (Presenting Author); Heidrun Stoeger (Co-Author)

Long COVID? Parents, Children, and Digital Media in "Post-Corona" (Poster Presentation)

Idit Katz (Presenting Author); Karina Ravikovich (Co-Author); Nelly Elias (Co-Author)

Session C 04 16:30–18:00 Location: SR 15.44

## Interventions for Promoting Math Leaning

#### Chair

Sarah Bichler

Achieving Sustainable Innovation Transfer in QuaMath: The Role of School Leadership (Poster Presentation)

Isabell Hußner (Presenting Author)

Promoting Learning of Mathematical Functions by Cognitively Activating Instructions (Poster Presentation)

Simona Daguati (Co-Author); Thomas Christiaan Braas (Co-Author); Norbert Hungerbühler (Co-Author); Armin Barth (Co-Author); Ralph Schumacher (Co-Author); Elsbeth Stern (ETH Zurich)

Buying half a frozen cake? How emphasizing mathematical operations affects word problem solutions (Poster Presentation)

Cornelia S. Große (Presenting Author); Andrea Wisenöcker (Co-Author); Marcel Mayr (Co-Author)

Working Memory Sensitive Math Intervention in Students With Intellectual Disabilities (Poster Presentation)

Sarah Schulze (Presenting Author); Jan Kuhl (Co-Author)

Session C 05 16:30–18:00 Location: SR 15.13

#### Teaching and Learning in Educational Contexts

Chair

Janka Goldan

Boosting Executive Functions with Cognitively Engaging Physical Activities (Roundtable)

Aishah Abdul Rahman (Presenting Author); Wei-Peng Teo (Co-Author); Joel Chia (Co-Author)

Object exploration in Chinese and Dutch 2- to 4-year-olds and the role of self-regulation (Roundtable)

Honghong Bai (Presenting Author); Ora Oudgenoeg-Paz (Co-Author); Ryanne Francot (Co-Author); Stella Christie (Co-Author); Paul Leseman (Co-Author)

From Brain to Classroom: How can we use insights about human learning in Education? (Roundtable)

Harold Bekkering (Donders Institute)

Session C 06 16:30–18:00 <u>Location: SR 15.42</u>

## Role of culture, parental involvement and individual characteristics in educational settings

#### Chair

Ka Lok Cheng

Longitudinal Associations between Moral Disengagement and different Bullying Roles (Poster Presentation)

Jule Eilts (Presenting Author); Jessica Wilke (Co-Author)

The impact of location on learning with authentic video modeling examples (Poster Presentation)

Ramona Hagenkötter (Presenting Author); Valentina Nachtigall (Co-Author); Katrin Rolka (Co-Author); Nikol Rummel (Co-Author)

The relationship between students' educational expectations, burnout, and parental involvement. (Poster Presentation)

Lotta Allemand (Presenting Author); Katja Upadyaya (Co-Author); Mika Niemelä (Co-Author); Marko Merikukka (Co-Author); Katariina Salmela-Aro (Co-Author)

Differences in Parental Involvement in Children With and Without Learning Disabilities (Poster Presentation)

Carolina Rodríguez Llorente (Presenting Author); Mei-Lin Chang (Co-Author); Iria Freire-Lavandeira (Co-Author); Sanjuana Rodríguez (Co-Author)

Biased or not? Cross-cultural views on ethnic bias in learning materials (Poster Presentation)

Josmario Albuquerque (Presenting Author); Bart Rienties (Co-Author)

Early-career teachers self-efficacy profiles and work-related burnout (Poster Presentation)

Paula Pedić (Presenting Author); Tea Pavin Ivanec (Co-Author)

Session C 07 16:30–18:00 Location: SR 15.33

## Digital Tools and Competence for Teaching and Learning

#### Speaker Orna Levin

How are learning analytics considered in educational data literacy? A systematic literature review (Roundtable)

Clara Schumacher (Presenting Author)

Exploring Generative AI Assistants in Higher Education Student's Study Process (Roundtable)

Minna Silvennoinen (Presenting Author); Satu Aksovaara (Presenting Author)

EffecTive Project: Enhancing Pedagogical Digital Competence to Transform Teaching and Learning (Roundtable)

Tina Seufert (Presenting Author); Kairit Tammets (Co-Author); Tabea Rosenkranz (Co-Author); Jüri Kurvits (Co-Author)

Session C 08 16:30–18:00 Location: SR 15.34

#### Assessment, Curricula and Training

#### Chair

Alessio Giarrizzo

Fast-tracking sustainability in engineering curricula: reflective engineers for the green transition (Roundtable)

Francesco Nappo (Presenting Author); Francesca Concia (Co-Author); Viola Schiaffonati (Co-Author); Domenico Brunetto (Co-Author); Giovanni Valente (Co-Author); Alessandra Tomasini (Politecnico di Milano)

 $\begin{tabular}{ll} \textbf{Dilemmatic Spaces in Assessment Reform. Comparing Norway and Switzerland} \\ \textbf{(Roundtable)} \end{tabular}$ 

Henning Fjørtoft (Presenting Author); Raphaël Pasquini (Presenting Author); Lise Vikan Sandvik (Presenting Author); Céline Lepareur (Co-Author)

Weekly developments in trainees' (motivation to) transfer training and the effect of coaching (Roundtable)

Bastian de Jong (Presenting Author); Joost Jansen in de Wal (Co-Author)

Session C 09 16:30–18:00 Location: SR 15.32

#### Developing Mentee and Pre-Service Teacher Competence

#### Chair

Anne Hoogmoed

Development and evaluation of a simulation game to enhance pre-service teachers' competences (Roundtable)

Madeleine Müller (Presenting Author); Susanne Jurkowski (Co-Author)

Mentors' and Mentees' Expectations for Mentor Roles and Their Impact on Mentoring Success (Roundtable)

Kathrin Emmerdinger (Presenting Author); Sonja Bayer (Co-Author); Claudia Uebler (Co-Author); Daniel Patrick Balestrini (Co-Author); Heidrun Stoeger (Co-Author); Albert Ziegler (University of Erlangen-Nuremberg)

The Development of Pre-service History Teachers' Pedagogical Content Knowledge (Roundtable)

Hanneke Tuithof (Presenting Author); Tim van der Heiden (Co-Author); Wouter Smets (Co-Author)

Session C 10 16:30–18:00 Location: HS 02.11

Equity and Inclusivity in Education Across Contexts – A Multi-Level Perspective

Chair

Katrien Struyven

Discussant

Katrien Hermans

Organiser

Elke Emmers

Talkative Spaces: Unlocking the Secrets of Inclusive Spatial Learning Environments (Single Paper)

Sanne Balendonck (Presenting Author)

Challenges and Opportunities for Inclusivity in Hybrid Higher Education: A Qual-

itative Study (Single Paper)

Liesbet Saenen (Presenting Author)

Community Perceptions and Inclusive Education for Students with Disabilities: A

Systematic Review (Single Paper)

CLEMENCIA SHOMARI (Presenting Author)

Self-Efficacy in Digital Competencies, Curiosity, and Science Literacy: Attitudes

and Beliefs (Single Paper)

Sibel Inci (Presenting Author); Volkan Hasan Kaya (Co-Author)

Equity and Inclusivity in Education Across Contexts - A Multi-Level Perspective

(Invited Symposium)

Session C 11 16:30–18:00 Location: HS 11.02

Noticing for Equity? On the Professional Vision of Teachers in the Diversity of Classrooms

Chair

Andreas Gegenfurtner

Discussant

Erno Lehtinen

Organiser

Eeva Haataja

First-grade teachers' evoked emotions, situational noticing, and individual support to students (Single Paper)

Saswati Chaudhuri (Presenting Author); Eeva Haataja (Co-Author); Eija Pakarinen (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author)

Do teachers pay more attention to strong students while ignoring struggling students? (Single Paper)

Christian Kosel (Presenting Author); Ricardo Böheim (Co-Author); Tina Seidel (Co-Author)

Gender attitudes, stereotypes, and selective attention in pre-service teachers' professional vision (Single Paper)

Alijagic Aldin (Presenting Author); Ricardo Böheim (Co-Author); Martin Daumiller (Co-Author); Markus Dresel (Co-Author); Sylvia Gabel (Co-Author); Özün Keskin (Co-Author); Doris Lewalter (Co-Author); Tina Seidel (Co-Author); Anita Tobisch (Co-Author); Andreas Gegenfurtner (Co-Author)

Facilitating noticing interviews to expand, disrupt, and reimagine mathematics instruction (Single Paper)

Ethan Rubin (Presenting Author); Elizabeth van Es (Co-Author)

Noticing for Equity? On the Professional Vision of Teachers in the Diversity of Classrooms (Invited Symposium)

Session C 12 16:30–18:00 Location: HS 15.04

Rethinking evidence-informed education: context, coherence, and critical friction

Chair

Hannah Bijlsma **Discussant** Daniel Muijs Evidence-informed practice to address inequalities (Single Paper)

Jana Groß Ophoff (Presenting Author)

A modified Delphi process toward best-evidence ITE core content on instructional

strategies (Single Paper)

Jasper Nijlunsing (Presenting Author); Dries D'haese (Co-Author); Tim Surma (Co-Author);

Paul Kirschner (Co-Author)

Teachers' uptake of research evidence: friction for change (Single Paper)

Jerich Faddar (Presenting Author)

Trends in the types and variety of evidence that educational researchers present

(2010-2024) (Single Paper)

Izaak Dekker (Presenting Author); Martijn Meeter (Co-Author)

Rethinking evidence-informed education: context, coherence, and critical friction (Invited Symposium)

(Invited Symposium)

Session C 13 16:30–18:00 Location: HS 15.12

Educational research for the future? A spotlight on Austria

Chair

Blerim Saqipi **Discussant** 

Muhammed Akbulut

Organiser

Heike Wendt; Roland H. Grabner; Sabine Schmölzer-Eibinger; Stephan Vogel; Wolfram Rollett Educational research for the future? A spotlight on Austria (Invited Symposium)

Inclusion in Austria: current status and future directions (Single Paper) Barbara Gasteiger-Klicpera (Presenting Author)

Educational technologies in Austria: contemporary debates, trends and persistent

gaps (Single Paper)

Elke Höfler (Presenting Author); Manuel Ninaus (Co-Author)

Inequalities in STEM in Austria: Educational Challenges and Opportunities (Single

Paper)

Manuela Paechter (Presenting Author); Julia Pöschko (Co-Author)

Small-scale multilingualism in (polyglossic) schools in Austria? (Single Paper)

Agnes Grond (University of Graz)

Session C 14 16:30–18:00 Location: HS 15.02

Empowering Teachers and Learners for the Digitized World: Chances, Challenges, and Pitfalls

Chair

Silke Hertel; Yves Karlen

Digital Promotion of SRL: Increasing Capacity to Deal with Complexity Requires Theory Integration (Single Paper)

Joachim Wirth (Ruhr University Bochum)

Human-AI Collaboration in Education: The Hybrid Future (Single Paper)

Inge Molenaar (Presenting Author)

Digital Technologies in the Classroom: Centering Teacher Voices, Perceptions and Experiences (Single Paper)

Timothy Cleary (Presenting Author)

Teachers' Beliefs About Learning and Teaching & Their Role in Promoting Self-

Regulated Learning (Single Paper) Stella Vosniadou (Presenting Author)

Cognitive Offloading and Self-Regulated Learning: The Paradox of Digital Support in the Age of AI (Single Paper)

Ernesto Panadero (Presenting Author)

Empowering Teachers and Learners for the Digitized World: Chances, Challenges, and Pitfalls (Invited Symposium)

Session C 15 16:30–18:00 Location: SR 15.45

Motivation and Engagement from Elementary School to Doctoral Studies

Chair

Trinidad Garcia

School attendance and the self-system model of motivational development: a registry data approach (Poster Presentation)

Suvi Kanerya (Presenting Author); Risto Hotulainen (Co-Author); Sanna Oinas (Co-Author)

Achievement Goals and Student Engagement: Exploring the Mediating Role of Learning Strategies (Poster Presentation)

Janja Sušić (Presenting Author); Daria Rovan (Co-Author); Ema Petričević (Co-Author); Staša Kukulj (Co-Author); Diana Kopačević Olčar (Co-Author); Marija Šarić Drnas (Co-Author)

Revealing network of graduate students' supervisory relationship, motivation, and engagement (Poster Presentation)

Yi Wang (Presenting Author); Vivian Wing Yan LEE (Co-Author); Ronnel Bornasal King (Co-Author)

Equating psychological constructs in elementary schooling: Does the method matter? (Poster Presentation)

Gavin Brown (Presenting Author); Bjorn Palmberg (Co-Author); Mikael Winberg (Co-Author); Catarina Andersson (Co-Author); Torulf Palm (Co-Author)

Developing and Validating Motivation Scale for Online Teacher Professional Development (Poster Presentation)

Aysegul Cetin (Presenting Author); Yesim Capa Aydin (Co-Author)

Unpacking Japanese Doctoral Students' Motivation for English Publishing: A Person-Centered Approach (Poster Presentation)

Wenjuan Cheng (Presenting Author); Yusuke Sakurai (Co-Author)

Session C 16 16:30–18:00 Location: SR 15.15

#### Assessment in religious education and argumentation instruction

Chair

Camilla Highfield

Religious education for sustainable development. Effects on environmental consciousness of students (Roundtable)

Claudia Gärtner (Presenting Author); Henrike Herdramm (Co-Author)

Enhancing Diagnostic and Instructional Value of Assessments Designed to Evaluate Written Arguments (Roundtable)

Alina Reznitskaya (Presenting Author); Michele Flammia (Co-Author); Noriko Takahashi (Co-Author); Ariel Sykes (Co-Author); Joe Oyler (Co-Author); Evgeny Chukharev (Co-Author); Abraham Onuorah (Montclair State University)

Assessment of pupils' learning preconditions in religious education (Roundtable) Jonas Bonke (Presenting Author); Claudia Gärtner (Co-Author); Annalena Sieveke (Co-Author); Alexander Unser (TU Dortmund University)

Session C 17 16:30–18:00 Location: HS 46.01

#### Early Mathematics Development in the Home Environment in Western and Eastern Cultures

Chair

Xiao Zhang

Discussant

Tuire Koponen

Home Spatial Learning Environments and Preschool Children's Spatial Skills and Interest (Single Paper)

Xiangzi Ouyang (Presenting Author); Xiao Zhang (Co-Author); Xinzhuo Zou (Co-Author)

Parental Homework Support in the Intergenerational Transmission of Math Skills and Math Anxiety (Single Paper)

Daria Khanolainen (Presenting Author); Evgenia-Peristera Kouki (Co-Author); Tuire Koponen (Co-Author); Minna Torppa (Co-Author); Timothy Papadopoulos (Co-Author)

Home Length Measurement Activities and Young Children's Length Measurement Skills (Single Paper)

Xiao Zhang (Presenting Author); Yawei Yang (Co-Author)

Is There an Association Between Frequency of HMEs and Children's Mathematical Outcomes?  $(Single\ Paper)$ 

Benjamin Hunt (Co-Author); Emma Blakey (Co-Author); Ella James-Brabham (Co-Author); Danielle Matthews (Co-Author); Emma Smith (Co-Author); Victoria Simms (Co-Author); Abbie Cahoon (Ulster University)

Early Mathematics Development in the Home Environment in Western and Eastern Cultures (Symposium)

Session C 18 16:30–18:00 Location: HS 15.03

Learning With, Not Just Learning From, Videos - Interactivity as Key Element in Video-based Learning

Chair

Christina Sondermann

Discussant

Vincent Hoogerheide

Organiser

Martin Merkt; Tino Endres

Learning With, Not Just Learning From, Videos – Interactivity as Key Element in Video-based Learning (Symposium)

Pause with Purpose: How Informed Training and Emotional Design Boost Learning with Videos (Single Paper)

Tino Endres (Presenting Author); Martin Merkt (Co-Author)

The Role of AI-Generated Summaries and Questions in Learning from Educational Videos (Single Paper)

Ayse Candan Simsek (Presenting Author); Gerrit Anders (Co-Author); Jonathan Göth (Co-Author); Luisa Specht (Co-Author); Markus Huff (Leibniz-Institut für Wissensmedien & University of Tübingen)

Between Pixels and Paper: Navigating Note-Taking Practices in Video-Based Learning (Single Paper)

Marijn Gijsen (Presenting Author); Sven De Maeyer (Co-Author); David Gijbels (Co-Author)

Pause and Note-Taking Behaviors during Video Learning (Single Paper)

Salomé Cojean (Presenting Author); Mathieu Pinelli (Co-Author)

Session C 19 16:30–18:00 Location: HS 03.01

What Does Neuroscience Add to Our Understanding of Learning Difficulties?

Chair

Anna Matejko; Dietsje Jolles

Improving outcomes for learners with dyscalculia & dyslexia: Insights from educational neuroscience (Single Paper)

Jo Van Herwegen (Presenting Author)

How schooling alters the brain in early childhood (Single Paper)

Floor Vandecruys (Presenting Author)

Brain differences in children with math disability vs. combined math and reading disability (Single Paper)

Anna Matejko (Presenting Author)

Neurobehavioral trajectories of symbol-sound learning: A new screening tool for reading difficulties? (Single Paper)

Milene Bonte (Presenting Author)

What Does Neuroscience Add to Our Understanding of Learning Difficulties? (Invited Symposium)

Session C 20 16:30–18:00 Location: HS 01.14

Metacognitive Challenges in Individual and Group Learning

Chair

Tanja Habermeyer

A SYSTEMATIC LITERATURE REVIEW OF MEASUREMENT PROPERTIES OF ALTERNATIVE MEASURES OF SRL (Single Paper)

Mohammad Arsyad Arrafii (Presenting Author); Mareike Kunter (Co-Author); Charlotte Dignath (Co-Author); Franziska Baier-Mosch (Co-Author)

Overconfident not only with the internet, but with all external information sources? (Single Paper)

Stephanie Pieschl (Presenting Author); Hannes Bransche (Co-Author); Georg Hamburger (Co-Author); Viola Schauß (Co-Author); Mia Zech (Co-Author); Björn Mattes (Co-Author)

Watching This and That: On-Device Multitasking Effects on Video Comprehension and Metacomprehension (Single Paper)

Angelica Ronconi (Presenting Author); Gianmarco Altoè (Co-Author); Lucia Mason (Co-Author)

A Case Study on the Role of Transactivity and Regulation of Learning for Groups' Emotional Climate (Single Paper)

Azusa Nakata (Presenting Author); Hanna Jarvenoja (Co-Author); Kateryna Zabolotna (Co-Author); Karel Kreijns (Co-Author); Armin Weinberger (Co-Author)

Presidential Address and Awards

18:15-20:00

Location: Aula

Presidential Address and Awards

Chair

Armin Weinberger

Presenters

Lucia Mason Raija Hämäläinen Armin Weinberger

A Green Message from Research to Support Students' Learning, Achievement, and Wellbeing (Presidential Talk)

Lucia Mason

Awards

Opening Reception

20:00-22:00

Opening Reception

## TUESDAY, 26 AUGUST 2025

Session D 01	08:30-10:00	Location: HS 15.12
Dession D or	00.00 10.00	Location, 115 19.12

#### Learning from Instructional Videos

Chair

Lea Schröder

A Meta-Analytic Review of the Instructor Presence Effect and Potential Moderators (Single Paper)

Maik Beege (Presenting Author)

The perspective principle in video learning: A matter of matching learning and testing perspectives? (Single Paper)

Marthe Wiggers (Co-Author); Bruno Bocanegra (Co-Author); Birgit Brucker (Co-Author); Nadine Marcus (Co-Author); Bjorn de Koning (Erasmus University Rotterdam)

Boosting Learning with Animations: A Case for Using Salient, Multimodal Retrieval Cues (Single Paper)

Nadine Scheller (Presenting Author); Felicia Meusel (Co-Author); Sascha Schneider (Co-Author)

Effects of Embedding Pre- or Post-tests in Instructional Video for Learning and Monitoring (Single Paper)

Margot van Wermeskerken (Presenting Author); Bart Schutte (Co-Author); Emmy Müller (Co-Author)

Session D 02 08:30–10:00 Location: HS 15.11

#### Bridging Theory and Practice in Teacher Education

Chair

Pablo Delgado

The science-practice gap: a matter of knowledge conceptualization, production, and transfer problems (Single Paper)

Hanke Korpershoek (Presenting Author)

Exploring Simulated Practice in Teacher Education: Opportunities to professionalize the teacher role (Single Paper)

Agnete Bueie (Presenting Author); Jo Inge Johansen Frøytlog (Presenting Author); Toril Aagaard (Presenting Author)

Push and pull motivating factors that influence retention in early career teachers in England (Single Paper)

Thomas Procter-Legg (Presenting Author); Rebecca Snell (Co-Author); Robert Klassen (Co-Author)

Training Pre-Service Teachers on Depression in Childhood and Adolescence: A Controlled Study (Single Paper)

Friederike Carlotta Grabowski (Presenting Author)

Session D 03 08:30–10:00 Location: SR 15.45

## Interventions for Teacher Education and Professional Learning

Chair

Sonja Hahn

Student agency in Professional Learning Communities (Poster Presentation)

Myrthe Lubbers (Presenting Author); Cindy Poortman (Co-Author); Kim Schildkamp (Co-Author)

The Impact of Peer Feedback on the Reflection of German and American Preservice Teachers (Poster Presentation)

Michael Putman (Presenting Author); Kate Gilbert (Co-Author); Anja Vocilka (Co-Author)

Pre-service teachers' complex paths towards teaching: Cases from Finland and Austria (Poster Presentation)

Katriina Maaranen (Presenting Author); Eeva Kaisa Hyry-Beihammer (Co-Author); Katariina Stenberg (Co-Author); Heidi Krzywacki (Co-Author); Jan Boehm (Co-Author)

A Proposed Reference Concept for Change (RCfC) for SDG4 Implementation in Teacher Education (Poster Presentation)

Sunet Grobler (Presenting Author)

How a Brazilian and a Finnish curricula address student teacher's professional agency and identity. (Poster Presentation)

Lais Oliveira Leite (Presenting Author); Jamylle Ouverney-King (Co-Author); Francisca Geny Lustosa (Co-Author); Erkko Sointu (Co-Author); Sari Havu-Nuutinen (Co-Author)

Teacher educators learning and implementing inquiry-into-practice in clinical courses (Poster Presentation)

Rotem Trachtenberg-Maslaton (Presenting Author); Aliza Segal (Co-Author)

Session D 04 08:30–10:00 Location: HS 15.03

## Innovation in Higher Education: AI, Sustainability and Collaboration

Chair

Marie Krenger

Digital objects in collaborative learning contexts: A review of current research (Single Paper)

Radu Balan (Presenting Author); Marian Ilie (West University of Timisoara)

Taking University to the Future: Towards Sustainability through Hybrid, Collaborative Spaces (Single Paper)

Johanna Pöysä-Tarhonen (Presenting Author)

Teachers' self-efficacy, motivation, commitment for using AI in teaching and views on AI ethics (Single Paper)

Sirkku Lähdesmäki (Presenting Author); Sanna Väisänen (Co-Author); Heidi Hyytinen (Co-Author)

A Trained Generative AI-Based Advisor: Innovating ODL Program Selection to Shape Students' Futures (Single Paper)

Sefa Emre Öncü (Presenting Author)

Session D 05 08:30-10:00 Location: HS 15.13

#### Professional Identity and Teacher Development

#### Chair

Sophia Mavridi

The hidden potential of professionalism discourses for the internationalisation of teacher education (Single Paper)

Heike Wendt (Presenting Author); Frederike Bartels (Co-Author)

Burnout on the Horizon? Cultural Influences on Occupational Health in Europe's Future Teachers (Single Paper)

Ivana Mašková (Presenting Author)

Crossing boundaries—pre-service teachers' situated and imagined views of socioe-motional competence (Single Paper)

Auli Lehtinen (Presenting Author); Emma Kostiainen (Co-Author); Piia Naykki (Co-Author)

Finnish student teachers' mindsets and intercultural competences (Single Paper) Meri Häärä (Presenting Author); Inkeri Rissanen (Co-Author); Elina Kuusisto (Co-Author); Mervi Kaukko (Co-Author)

Session D 06 08:30–10:00 Location: HS 01.22

#### Effects of AI-Generated Feedback

#### Chair

Nick Hopwood

Blending Peer-Feedback with AI Feedback to Improve Pre-Service Teachers' Evidence-Informed Reasoning (Single Paper)

Martin Greisel (Presenting Author); Tugce Özbek (Co-Author); Julia Hornstein (Co-Author); Ingo Kollar (Co-Author)

AI-Generated Feedback Enhances Writing Performance: A Case Study in Teacher Education (Single Paper)

Annette Kinder (Presenting Author); Fiona J. Briese (Co-Author); Marius Jacobs (Co-Author)

Does AI-generated adaptive feedback influence interest and learning in digital statistics education? (Single Paper)

Elisabeth Bauer (Presenting Author); Constanze Richters (Co-Author); Amadeus J. Pickal (Co-Author); Moritz Klippert (Co-Author); Michael Sailer (Co-Author); Matthias Stadler (Co-Author)

Medical Students' Perception of AI-generated Feedback and Feedforward on communication skills (Single Paper)

Moritz Bauermann (Presenting Author); Ann-Kathrin Schindler (Co-Author); Tobias Hallmen (Co-Author); Miriam Kunz (Co-Author); André Elisabeth (Co-Author); Thomas Rotthoff (Co-Author)

## Session D 07 08:30–10:00 Location: HS 01.14

## Teacher Agency, Autonomy and Feedback for Inclusive and Creative Education

Chair

Mayra Mascareño Lara

Exploring Creative processes in Minecraft Through Timesync Comment Analysis (Single Paper)

Jiayi Cen (Presenting Author); Nora McIntyre (Co-Author); Christian Bokhove (Co-Author)

Perspectives on autonomy among teachers in refugee settings during emergency remote teaching (Single Paper)

Koula Charitonos (Presenting Author); Betul Khalil (Co-Author)

Assessing teacher agency: validation of the Italian version of an ecological model questionnaire (Single Paper)

Laura Landi (Presenting Author); Chiara Bertolini (Co-Author); Andrea Pintus (Co-Author)

Feedback in inclusive mathematics education: Insights on its processing and outcomes  $(\mathrm{Single}\ \mathrm{Paper})$ 

Fynn Töllner (Presenting Author); Poldi Kuhl (Co-Author); Michael Besser (Co-Author)

## Session D 08 08:30–10:00 Location: Festsaal

### TeachingTools for Improving Knowledge, Attitudes and Interest

Chair

Magnus Henrik Sandberg

Evaluating the effects of variation theory driven civics teaching in elementary school. (Single Paper)

Kristoffer Larsson (Presenting Author); Klas Andersson (Co-Author)

Can Refutation Text Change Attitudes Towards Climate Action via Building Knowledge? (Single Paper)

Inga Glogger-Frey (Presenting Author); Lewia Gerlinger (Co-Author); Guido Mehlkop (Co-Author)

Autobiographical Memory Cues as Elements of Emotional Text Design to Boost Interest Development (Single Paper)

Ömer Tuğşad Akgül (Presenting Author); Tino Endres (Co-Author); Sascha Schneider (Co-Author)

Even With Support, Generating Examples Is Less Effective Than Classifying Provided Examples (Single Paper)

Tim M. Steininger (Presenting Author); Thamar Voss (Co-Author); Joerg Wittwer (Co-Author)

Session D 09 08:30–10:00 Location: HS 05.01 Experimentierhörsaal

#### Child Development and Leanring in Pre-School and First Years of School Yes

#### Chair JUNYI YANG

Children's spontaneous mathematics in pre-schools in Australia, New Zealand, Sweden, and the UK (Single Paper)

Natalie Flint (Presenting Author); Amelia Church (Co-Author); Jakob Cromdal (Co-Author); Tim Jay (Co-Author); Katie Seabridge (Co-Author); Victoria Simms (Co-Author); Elizabeth Stokoe (Co-Author); Sally Wiggins (Co-Author); Annerose Willemsen (Co-Author); Amanda Bateman (Birmingham City University)

Types of dialogic interaction based on photo-elicitation in early childhood education and care  $(\mathrm{Single\ Paper})$ 

Heli Muhonen (Presenting Author); Mimmu Sulkanen (Co-Author); Anne-Elina Salo (Co-Author); Maarit Alasuutari (Co-Author)

A Comparison of Inference-making in First- and Second Language Learners in Preschool  $(\mathrm{Single\ Paper})$ 

Frida Johanne Holmen (Presenting Author); Kari-Anne Bottegård Næss (Presenting Author); Thormod Idsoe (Co-Author)

Crafting GrafGrus: Advancing Receptive Grammar Skills Assessment in Children Aged 5-8 (Single Paper)

Susanne Seifert (Presenting Author); Lisa Paleczek (Co-Author); Franziska Viertel (Co-Author)

Session D 10 08:30–10:00 Location: HS 15.02

## Issues of vision, feedback and relationships in teacher education

#### Chair

Ana Remesal

Enabling meaningful feedback in teacher education: The use of virtual reality-based microteaching (Single Paper)

Lucas Jasper Jacobsen (Presenting Author); Kira Weber (Co-Author); Christopher Neil Prilop (Co-Author); Yizhen Huang (Co-Author); Eric Richter (Co-Author)

Analysing pre-service teachers' futures consciousness through futures visioning (Single Paper)

Iina Hyyppä (Presenting Author); Ilona Södervik (Co-Author); Heidi Krzywacki (Co-Author); Antti Laherto (Co-Author)

Mentor-Mentee Relationship Profiles of Teacher Students in internships (Single Paper)

Michael Himmelsbach (Presenting Author); Ramona Obermeier (Co-Author); Manuela Gamsjäger (Co-Author)

A qualitative study on student teachers' feedback to their students after failed performance (Single Paper)

Sonja Laine (Presenting Author); Ita Puusepp (Co-Author); Kirsi Tirri (Co-Author)

Session D 11 08:30–10:00 Location: HS 03.01

## Culture, Identity and Discourse

Chair

Honghong Bai

Measuring attitudes towards Muslims among German RE pupils - Examining Social-Psychological Factors (Single Paper)

Janine Kuropka (Presenting Author)

Linguistic Aspects in the Explaining Skills of (Prospective) Teachers: A Systematic Review (Single Paper)

Saskia Samland (Presenting Author); Lina Wirth (Co-Author); Poldi Kuhl (Co-Author)

Discourse Between Text and Identity: Exploring Identity in Dialogical Literature Teaching (Single Paper)

Yair Koren Maimon (Presenting Author); Merav Eyal (Co-Author); Kalanit Segal Levit (Co-Author)

In civic education classes and beyond: a pilot study on discourse, conflict, and agonal plurality (Single Paper)

Sabine Manzel (Presenting Author); Judith Niedecker (Co-Author)

Session D 12 08:30–10:00 Location: SR 03.K1

## Advancing Cogniton and Metacognition in Teaching and Learning

Chair

Armin Jentsch

Enhancing Undergraduate Metacognitive Awareness through Active Instructional Practices (Single Paper)

Irit Sasson (Presenting Author); Sigal Tifferet (Co-Author)

Toward a Comprehensive Understanding of Educational Ethics. An Interdisciplinary Approach (Single Paper)

Sabrina Bacher (Presenting Author)

Enhancing Cognitive Learning in Laparoscopic Surgery: Feedback, Self-Efficacy, and Self-Assessment (Single Paper)

Cau Marine (Presenting Author); NATHALIE HUET (Co-Author); Amaël Arguel (University of Toulouse)

Session D 13 08:30–10:00 Location: SR 15.42

# Students' Cognitive Functioning and Teachers' Perspectives

### **Speaker** Linda Salihu

The Elli's World: an executive functions training for primary school. (Poster Presentation)

Carlotta Rivella (Presenting Author); Clara Bombonato (Co-Author); Constanza Ruffini (Co-Author); Chiara Pecini (Co-Author); Paola Viterbori (Co-Author)

Supporting teachers for effective learning progress monitoring: a longitudinal intervention study (Poster Presentation)

Amelie Fuchs (Presenting Author); Anika Radkowitsch (Co-Author); Daniel Sommerhoff (Co-Author)

Towards Teacher Profiles of Perceptions and Use in Digital Personalized Learning for K-12 (Poster Presentation)

Ann Fastré (Presenting Author); Stefanie Vanbecelaere (Co-Author); Fien Depaepe (Co-Author); Inge Molenaar (Co-Author); Carolien Knoop-van Campen (Co-Author)

Teachers' Perspectives on Integrating Technology-Enhanced-Learning in Elementary Classrooms (Poster Presentation)

Nevin Avci (Presenting Author)

Personalized L2 Learning in Schools: A Review of Context, Learner Characteristics, Agency and Target (Poster Presentation)

Min Li (Presenting Author); Sarah I. Hofer (Co-Author); Sarah Bichler (Co-Author)

Game4CED: the Early Detection Colorblindness at school through board games (Poster Presentation)

Liliana Silva (Presenting Author); Elsa Manzini (Co-Author); Michela Bettinelli (Co-Author)

Session D 14 08:30–10:00 Location: HS 11.03

# Advancing methods and assessment through intensive data

### Chair

Marloes van Roon

Assessing computational thinking task behaviour in Finnish basic education using log data (Single Paper)

Cristiana Mergianian (Presenting Author); Laura Nyman (Co-Author); Muhterem Dindar (Co-Author); Ninja Hienonen (Co-Author); Mari-Pauliina Vainikainen (Co-Author)

STEM learning and engagement in making activities: a randomised controlled trial (Single Paper)

Ellen Egeland Flø (Presenting Author)

Impact of Social Support and Self-Beliefs on School Engagement in Adolescence: A Comparative Study (Single Paper)

Olga Steinberg (Presenting Author); Diana Raufelder (Co-Author); Tuomo Virtanen (Co-Author); Valtteri Eskola (Co-Author); Kati Vasalampi (Co-Author)

Rethinking intensive longitudinal data in educational research: the Between-Not-Within fallacy  $(\mathrm{Single\ Paper})$ 

Georg Krammer (Presenting Author)

Session D 15 08:30-10:00 Location: HS 02.01

# Reading and Writing Performance in Different Contexts

Speaker Linda Salihu Does reading still make you smarter? It depends. (Single Paper)

Oscar Skovdahl Joerstad (Presenting Author); Øistein Anmarkrud (Co-Author); Helge I. Strømsø (Co-Author); Ivar Bråten (University of Oslo)

The effects of intelligible speech noise on reading idiomatic expressions: an eye-tracking study (Single Paper)

Gaia Spicciarelli (Presenting Author); Inmaculada Fajardo Bravo (Co-Author); Barbara Arfé (Co-Author)

Writing better with AI? Enhancing (language) learners' writing through AI feedback in meta-analyses (Single Paper)

Sina Verena Scherer (Presenting Author); Steve Graham (Co-Author); Vera Busse (Co-Author)

Reading skills and development of task persistence in Grade 1 – snapshots taken twelve years apart (Single Paper)

Anna-Liisa Jõgi (Presenting Author); Piret Soodla (Co-Author)

Session D 16 08:30–10:00 Location: HS 46.01

# Motivational, Technological and Contextual Factors in Learning Outcomes

Chair

Idwer Doosje

"It's a lot of work": Teacher students' metalinguistic interaction in a Grammar Lab (Single Paper)

Ana Luísa Costa (Presenting Author); Xavier Fontich (Presenting Author)

A matter of science? Insights from an experimental study on the communication of loneliness (Single Paper)

Annika Maria Schepers (Presenting Author); Dorothe Kienhues (Co-Author); Regina Jucks (Co-Author)

ICT Factors and Student Learning Outcomes: A Systematic Review of PISA Studies (Single Paper)

Minju KIM (Presenting Author); Pey-Yan LIOU (Co-Author)

The role of motivational and cognitive support in fostering AI Literacy of novices (Single Paper)

Jana Boos (Presenting Author); Salome Wagner (Co-Author); Iris Backfisch (Co-Author); Thérése Eder (Co-Author); Andreas Lachner (Co-Author)

### Session D 17 08:30–10:00 Location: HS 02.21

### Teacher Beliefs, Knowledge and Judgments

Chair

Katrien De Cocker

Mathematics teachers' beliefs and practice regarding formal versus situational tasks on functions (Single Paper)

Ute Sproesser (Presenting Author); Johannes Cuno (Presenting Author); Anselm Strohmaier (Co-Author)

Long-term development of teachers' pedagogical content knowledge over 15 years (Single Paper)

Nikolaus Bönke (Presenting Author); Michael Besser (Co-Author); Thamar Voss (Co-Author)

The effects of deliberative vs. implemental mindsets on teacher judgements - an experimental study (Single Paper)

Elif Özel (Presenting Author); Timo Leuders (Co-Author); Katharina Loibl (Co-Author)

Finnish upper secondary students' achievement, well-being and educational choices per math choice (Single Paper)

Sirkku Kupiainen (Presenting Author); Risto Hotulainen (Co-Author)

Session D 18 08:30–10:00 Location: SR 15.44

# Opportunities for Teaching, Learning and Students' Achievement

Chair

Martina Graichen

Students seeking emotional support in AI: The importance of teacher mediation in higher education (Poster Presentation)

María Fernanda Rodríguez (Presenting Author)

Explaining the Effects of Team Teaching on Student Achievement through Motivational Outcomes (Poster Presentation)

Dries De Weerdt (Presenting Author); Mathea Simons (Co-Author); Elke Struyf (Co-Author)

Course Achievement and Gender Disparities in an Online Flipped Classroom Programming Course (Poster Presentation)

Smirna Malkoc (Presenting Author); Alexander Steinmaurer (Presenting Author); Christian Gütl (Co-Author); Silke Luttenberger (Co-Author); Manuela Paechter (Co-Author)

Realizing Potentials of Gifted Students: A Scoping Review of Creativity Assessment Tools (Poster Presentation)

Serene Chan (Presenting Author); Jesus Alfonso D. Datu (Co-Author); Jiahong Zhang (Co-Author); Mantak Yuen (Co-Author)

How Elementary Students Understand 'Science' and Explore It Through Their Experiences (Poster Presentation)

Sabine Hasenhütl (Presenting Author); Silke Luttenberger (Co-Author); Manuela Paechter (Co-Author)

The use of digital storytelling as perceived by Polish pre-service ECEC and primary school teachers (Poster Presentation)

Olga Wysłowska (Presenting Author); Paulina Marchlik (Co-Author); Kamila Wichrowska (Co-Author); Maria Hatzigianni (Co-Author)

# Session D 19 08:30–10:00 Location: HS 01.15

# Advancing Learning with VR, AR and Digital solutions

### Chair

Tina Seufert

From Experimentation to Integration: How Values and Context Shape VR/AR Adoption in Higher Education (Single Paper)

Kateryna Holubinka (Presenting Author); Sabrine Hassane (Co-Author); Corrie Urlings (Co-Author); Giel van Lankveld (Co-Author); Roland Klemke (Co-Author); Renate de Groot (Co-Author)

Self-Explanation Prompts to Enhance Augmented Reality-Supported Lab Work (Single Paper)

Kristin Altmeyer (Presenting Author); Peter Edelsbrunner (Co-Author); Barbara Gränz (Co-Author); Sarah Hofer (Co-Author); Co-Author); Co-Author); Jochen Kuhn (Co-Author); Zoya Kozlova (Co-Author); Stefan Küchemann (Co-Author); Andreas Lichtenberger (Co-Author); Sarah Malone (Co-Author); Roman Schmid (Co-Author); Ralph Schumacher (Co-Author); Bermann Steinmacher (Co-Author); Max Warkentin (Co-Author); Roland Brünken (Co-Author); Andreas Vaterlaus (ETH Zurich); Elsbeth Stern (ETH Zurich)

Digital Solutions for Enhancing Low SES Primary School Students' Mathematical Proficiency (Single Paper)

Réka Ökördi (Presenting Author); Renáta Kiss (Co-Author); Gyöngyvér Molnár (Co-Author)

Previous VR experience and embodiment in immersive VR training scenarios (Single Paper)

Anu Lehikko (Presenting Author)

Session D 20	08:30-10:00	Location: HS 15.14
Learning at Workplace		
Chair Robin Göller	Measurement models in workplace learning research: A tion (Single Paper) Josef Guggemos (Presenting Author); Michael Goller (Presenting	-

Fostering Apprentices' Informal Learning: A Mixed-Methods Study on Situational Readiness (Single Paper)

Annelie Lorber (Presenting Author); Julian Decius (Co-Author); Wilken Wehrt (Co-Author)

Effects of Digital Communication on Learning and Knowledge Sharing in Office Workplaces (Single Paper)

Michael Goller (Presenting Author); Alina Gierosz (Co-Author); Andreas Rausch (Co-Author)

Professional responsibility and assistive technologies in care: learning to navigate the unforeseen (Single Paper)

Asa Makitalo (Presenting Author); Isabel Brandenberger (Co-Author)

Session D 21 08:30–10:00 Location: HS 02.11

# Interventions for Enhancing Teacher and Educational Leadership

### Chair

Anna Matejko

### Educational Leadership and the Diffusion of Innovation (Single Paper)

Barbara Otto (Presenting Author); Lindsey Devers Basileo (Co-Author); Merewyn Lyons (Co-Author); Michael D. Toth (Co-Author); Matteo Carmignola (Co-Author); Franz Hofmann (Co-Author)

Research-based learning and inquiry habits of mind in teacher education: A systematic review (Single Paper)

Julia Raberger (Presenting Author); Ira Darmawanti (Co-Author); Kristin Weiherer (Co-Author); Elena Stamouli (Co-Author); Konstantinos G aravelas (Co-Author); Carla Quesada-Pallarès (Co-Author); Dominik E. Froehlich (University of Vienna; University of Sustainability Vienna - Charlotte Fresenius University)

Enhancing Teachers' Pedagogical Digital Competence: A Comparison of Two Training Interventions (Single Paper)

Kairit Tammets (Presenting Author); Milena Sarmiento-Márquez (Co-Author); Jüri Kurvits (Co-Author)

How conceptions of teaching relate to teachers' emotional experience (Single Paper) Marc Clarà (Presenting Author); Aina Franch Aguiló (Co-Author); Jordi Coiduras (Co-Author); Patricia Silva (Co-Author); Nick Kelly (Co-Author); Tatiana López (Co-Author); Priscila Marchán (Co-Author); Bárbara Padula (Co-Author); Alba Vallés (University of Lleida)

Session D 22 08:30–10:00 Location: HS 15.06

# Literacy and spatial understanding in preschoolers and young students

### Chair

Natalia Avila Reyes

In quest for a dialogic space in primary writing instruction (Single Paper)

Maryam Khosronejad (Presenting Author); Mary Ryan (Co-Author)

Examining English and Chinese Literacy Profiles in Hong Kong Kindergarteners and Their Math Outcomes (Single Paper)

Di Zhang (Presenting Author); Chan Wang (Co-Author); Ruotong Chen (Co-Author); Chun Wing Ng (Co-Author); Kerry Lee (Co-Author); Alfredo Bautista (Co-Author); Jin Sun (Co-Author); Dan Lin (Co-Author); Sum Kwing Cheung (Co-Author)

Cognitive and Linguistic Predictors of L2 English Spelling Accuracy and Misspellings (Single Paper)

Heike Mlakar (Presenting Author); Joanna Hirst-Plein (Co-Author); Martin Koch (Co-Author)

Session D 23 08:30–10:00 Location: HS 12.01

# Inclusion and systematic challenges in education

### Chair

Geerte Savenije

The power and challenges of introducing instructional change in school systems (Single Paper)

Jonathan Supovitz (Presenting Author)

Realizing Potentials of the Japanese Educational System for Inclusive Education across Boarders (Single Paper)

Eva Kleinlein (Presenting Author)

Exploration of Catalan Classrooms: The Hidden Impact of Language Policies and Ideologies (Single Paper)

Laura Castañe Bassa (Presenting Author)

Is disability an afterthought in British higher education? (Single Paper)

George Koutsouris (Presenting Author); Lauren Stentiford (Co-Author); Eleni Dimitrellou (Co-Author); Zizheng Yu (Co-Author)

Session D 24 08:30–10:00 Location: HS 11.01

### **Examining and Promoting Literacies Across Domains**

### Chair

Franziska Greiner

On the content dimension of financial literacy frameworks: a qualitative and quantitative analysis (Single Paper)

Nicole Ackermann (Presenting Author); Baerbel Fuerstenau (Presenting Author); Carmela Aprea (Co-Author); Clara Vonhof (Co-Author)

Promoting Mental Health Literacy Through Education: Meta-Analysis of School-Based Programs for Youth (Single Paper)

Shari Dudda (Presenting Author); Belinda Poole (Co-Author); Maeve Dwan-O'Reilly (Co-Author); Annika Edelmann (Co-Author); Selina Urbanek (Co-Author); Maren Henn (Co-Author); Sophie Herzberger (Co-Author); Michèle Wessa (Co-Author); Andrea Reupert (Co-Author); Gerhard Buettner (Co-Author); Alexa von Hagen (IDeA - Center for Research on Individual Development and Adaptive Education of Children at Risk)

Don't wurrie, bee heppie? Relations between spelling ability, self-concept and achievement emotions (Single Paper)

Sanne van der Ven (Presenting Author); Elise de Bree (Co-Author)

Session D 25 08:30–10:00 Location: SZ 15.21

### Understanding Teachers: Emotions, Reasoning and Classroom Practice

Chair

Nisrina Ikbar Wibisono

How do classroom disruptions affect visual monitoring strategies? Investigating teachers' scanpaths (Single Paper)

Sylvia Gabel (Presenting Author); Christian Kosel (Co-Author); Rebekka Stahnke (Co-Author); Andreas Gegenfurtner (Co-Author)

The Evolution of Pedagogical Reasoning: A Scoping Review on the Conceptual and Operational Shifts (Single Paper)

Lotte Schreuders (Presenting Author); Frank Cornelissen (Co-Author); Bieke Schreurs (Co-Author); Natalie Pareja Roblin (Co-Author)

Teachers Can Intentionally Increase Elementary Students' Prosocial Behavior (Single Paper)

Christi Bergin (Presenting Author); Lindsay Brockmeier (Co-Author)

EduSEL-R: A Comprehensive Tool for Assessing Educators' Social-Emotional Competencies (Single Paper)

Ronen Kasperski (Presenting Author); Merav Hemi (Co-Author)

Session D 26 08:30–10:00 Location: HS 02.23

### **Motivational Climate and Instructional Practices**

Chair

Kara Makara

Relationships between goals for teaching and instructional practices in Lao teachers (Single Paper)

Anongsack Mahavong (Presenting Author); József Balázs Fejes (Co-Author)

Higher education students' basic psychological needs satisfaction in flipped engineering mathematics (Single Paper)

Ilmari Puhakka (Presenting Author); Petri Nokelainen (Co-Author); Vikke Vuorenpää (Co-Author); Johanna Rämö (Co-Author); Riikka Kangaslampi (Co-Author); Elina Viro (Co-Author); Jani Hirvonen (Co-Author); Simo Ali-Löytty (Co-Author); Terhi Kaarakka (Tampere University)

Motivational Climate Based on Teachers' Perceptions: A Scoping Review Using Achievement Goal Theory (Single Paper)

József Balázs Fejes (Presenting Author); Anongsack Mahavong (Co-Author); David J. Shernoff (Co-Author); Elisa S. Shernoff (Co-Author)

Classroom cartoon vignettes for exploring teachers' analysis of mathematical modelling situations (Single Paper)

Sebastian Kuntze (Presenting Author); Stefanie Hartmann (Co-Author); Jens Krummenauer (Co-Author)

Julian Roelle

Session D 27 08:30–10:00 Location: HS 15.04

Shaping Instructional Design: Four Research Directions Inspired by Alexander Renkl

Chair Instructional Explanations and Self-explanations: Focused Processing is the Key

Tino Endres (Single Paper)

**Discussant** Kirsten Berthold (Presenting Author)

Hans Gruber
Organiser

Alexample: Alexander Renkl's Impact on Example-Based Learning (Single Paper)

Tamara Van Gog (Presenting Author)

Alexander Renkl's Impact on Retrieval Practice Research (Single Paper)

Shana Carpenter (Oregon State University)

Alexander Renkl's Role in the Development of the "Freiburg Self-Regulated-

Journal-Writing Approach" (Single Paper)

Matthias Nückles (Presenting Author)

Shaping Instructional Design: Four Research Directions Inspired by Alexander

Renkl (Invited Symposium)

Session D 28 08:30–10:00 Location: HS 11.02

AI tools and UDL use in school and university teaching

Chair Inclusive Blended Learning: University Students' Perceptions, Challenges, and

Alina Kadluba UDL-Based Solutions (Single Paper)

Marta Lucchetti (Presenting Author); Chang Zhu (Co-Author)

Metacognitive strategies for effective use of Artificial Intelligence in university

teaching (Single Paper)

Natalia Lara Nieto-Márquez (Presenting Author)

The Science of Learning and Development - at the interface of brain science and

AI in the classroom (Single Paper)

Minkang Kim (Presenting Author); Young Hoan Cho (Co-Author); Hunkoog Jho (Co-Author)

Relationships between student teachers and IA tools: 'Sometimes I have better

ideas' (Single Paper)

Lina Calle-Arango (Presenting Author); Aurora Badillo (Co-Author)

Coffee Break 10:00–10:30

Coffee Break

Session E 01 10:30–12:00 Location: SR 15.42

Advancing teacher education and student development through relationship, knowledge integration and research rigor

### Chair

Jonas Bonke

Fostering students' psychotherapeutic competence through a guided reflection intervention (Poster Presentation)

Verena Watzek (Presenting Author); Gerhard Messmann (Co-Author); L. Romina Bornhaupt (Co-Author); Sebastian Ertl (Co-Author); David Kolar (Co-Author); Regina Mulder (Co-Author)

Epistemic Ideals and Onto-Epistemological Categorization in Danish USS Across Three Subjects (Poster Presentation)

Casper Juul (Presenting Author)

Making pre-service teachers 2nd order cross-domain knowledge integration tangible with the MC-KIT (Poster Presentation)

Inka Hähnlein (Presenting Author)

Leading for Coherence: Program Leaders' Impact on Curriculum Coherence in Teacher Education (Poster Presentation)

Pieter Flamand (Presenting Author); Ruben Vanderlinde (Co-Author); Melissa Tuytens (Co-Author)

A Comprehensive Approach of Sample Size Planning for Intraclass Correlation Coefficients (Poster Presentation)

Wei-ming Luh (Presenting Author); Jiin-Huarng Guo (Co-Author)

Measuring students' perceptions of affective student-teacher relationships in vocational education (Poster Presentation)

Manon Toonen (Presenting Author); Debora Roorda (Co-Author); Inge Zweers (Co-Author); Helma Koomen (Co-Author)

Session E 02 10:30–12:00 Location: LS 15.03

### Assessing and transforming Misinformation, attitudes and beliefs

### Speaker

Christina Tulea

Developing Assessment Scenarios to Support Teacher Facilitation of Student Argumentation (Roundtable)

Alina Reznitskaya (Presenting Author); Joe Oyler (Co-Author); Ariel Sykes (Co-Author); Michele Flammia (Co-Author); Noriko Takahashi (Co-Author); Evgeny Chukharev (Co-Author); Abraham Onuorah (Montclair State University)

Transforming Knowledge, Attitudes, and Beliefs: The Impact of a Climate Justice Intervention (Roundtable)

Sophia Mattioda (Co-Author); Anisha Singh (Co-Author); Daniel Licea (Co-Author); Kayla King (Co-Author)

A systematic review of how misinformation interventions consider creation and character (Roundtable)

Anna Premo (Presenting Author); Martina Vincoli (Co-Author); Martina Rau (Co-Author)

Session E 03 10:30–12:00 Location: SR 15.43

# Interest, Achievement Motivation and Emotions

### Chair

Emmanuel Manalo

An Experimental Study on the Conscientiousness × Interest Compensation (CONIC) Model in Self-Control (Poster Presentation)

Juyeon Song (Presenting Author); Wu Ri Byeol Lee (Co-Author); Woogul Lee (Co-Author)

Effects of linguistic complexity of academic language on achievement motivation and emotions (Poster Presentation)

Lina Wirth (Presenting Author); Saskia Samland (Co-Author); Timo Ehmke (Co-Author); Poldi Kuhl (Co-Author)

Standardized Assessment of Professional Vision When Focusing Multiple Teaching Quality Dimensions (Poster Presentation)

Jasmin Lilian Bauersfeld (Presenting Author); Patricia Bourcevet (Co-Author); Heike Hahn (Co-Author); Bernadette Gold (Co-Author)

Parents' Education and STEM Occupation Shape Learning Resources and Elective Intentions in STEM (Poster Presentation)

Sonja Bayer (Presenting Author); Kathrin Emmerdinger (Co-Author); Heidrun Stoeger (Co-Author); Albert Ziegler (Co-Author)

The relationship between intellectual preferences and interest in history and science (Poster Presentation)

Kazuhiro Sasaki (Presenting Author); Sachiko Kiyokawa (Co-Author)

The Relationship Between Flow and Motivation: A Meta-Analysis With Implications for Education (Poster Presentation)

Siem Buseyne (Presenting Author); Sameh Said-Metwalyt (Co-Author); Fien Depaepe (Co-Author); Annelies Raes (Co-Author)

Session E 04 10:30–12:00 Location: SR 15.45

### Supporting Math Learning in Young Children

### Chair

Bernadette Dilger

Developing a model for mathematics-specific instructional quality (Poster Presentation)

Aslihan Bayrak (Presenting Author); Milena Damrau (Co-Author); Stefan Ufer (Co-Author)

Investigating preschoolers' number word learning through pupillometry (Poster Presentation)

Nina Jost (Presenting Author); Stephanie Bugden (Co-Author); Samuel Forbes (Co-Author); Anna Matejko (Co-Author)

Toddlers' learning of numbers in book reading – the pedagogical use of representations (Poster Presentation)

Camilla Björklund (Presenting Author); Hanna Palmér (Co-Author)

Links between parents' beliefs, children's self-concept and competencies in kindergarten in math (Poster Presentation)

Valerie Berner (Presenting Author); Vroni Hischa (Co-Author); Tina Schiele (Co-Author); Samuel Essler (Co-Author); Frank Niklas (Co-Author); Hedwig Gasteiger (Osnabrück University)

Can Creative Musical and Mathematical Thinking Be Developed Among First and Second Graders? (Poster Presentation)

Libby Azaryahu (Presenting Author); Orit Brosa (Co-Author); Sara Hershkovitz (Co-Author); Ofek Sasson (Co-Author); Esther Adi-Japha (Bar-Ilan University)

Developing an assessment tool in early mathematics: The ABC123 MathVocabulary Test (Poster Presentation)

Anita Lopez-Pedersen (Presenting Author); Vibeke Rønneberg (Co-Author); Tonje Amland (Co-Author)

Session E 05 10:30–12:00 Location: SR 15.13

# Teacher knowledge, experiences and activities

Non-teaching activities of teachers in Germany: Digital transformation in vocational education (Roundtable)

Verena Pfeiffer (Presenting Author); Michael Goller (Co-Author)

Should I stay or should I go? - Professionalisation processes of beginner in-service teachers (Roundtable)

Vanessa Pieper (Presenting Author); Rosi Ritter (Presenting Author); Anna-Lena Molitor (Co-Author); Judith Schellenbach-Zell (Co-Author); Michael Rochnia (Co-Author)

What (mis-)conceptions do teachers have? - A questionnaire on misconceptions on video-based learning (Roundtable)

Felicitas Licht (Presenting Author); Marie-Christin Krebs (Co-Author); Alexander Eitel (Co-Author)

Session E 06 10:30–12:00 Location: SR 15.33

Adessing new educational challenges: epistemic justice, curricular freedom of choice and adaptive testing

Chair

Jonathan Supovitz

Competencies for academic success in higher education – the case of adaptive testing (Roundtable)

Michael Rochnia (Presenting Author); Gino Casale (Co-Author); Carolin Frank (Co-Author); Johannes Naumann (Co-Author); Ralf Erlebach (Co-Author)

How does curricular freedom of choice influence students' (self-regulated) learning and motivation? (Roundtable)

Renée Hendriks (Presenting Author); Milou van Harsel (Co-Author); Judith Teunissen (Co-Author); Peter Verkoeijen (Erasmus University Rotterdam)

Simon Knight (Presenting Author); Jason Braasch (Co-Author); Laura Allen (Co-Author)

Session E 07 10:30–12:00 Location: SR 15.34

### **Advanced Tools for Inclusive Educational Practices**

Chair

Lucas Jasper Jacobsen

ACT-AI: Action for Collaborative Advancements in AI in Education (Roundtable) Despoina Georgiou (Presenting Author); Annemie Struyf (Co-Author); Jacqueline Wong (Co-Author); Anastasia Datsogianni (Co-Author); Olga Ioannidou (Co-Author); Declan Qualter (Co-Author); Eileen Bowman (Co-Author)

Exploring GenAI Feedback for CALD Students: Towards Inclusive and Effective Feedback Practices (Roundtable)

Nisrina Ikbar Wibisono (Presenting Author); Joanna Tai (Co-Author); Dimitar Angelov (Co-Author); Thomas Corbin (Co-Author); Beate Grawemeyer (Co-Author)

Cohort trends in mathematics for primary school students with special educational needs (Roundtable)

Rebecca Schneider (Presenting Author); Mareike Ehlert (Co-Author); Aleksander Kocaj (Co-Author)

Session E 08 10:30–12:00 Location: HS 15.04

### New developments in shared reading research

Chair

Roel van Steensel

Discussant

Frank Niklas

Vocabulary instruction during interactive book reading with emergent bilinguals

(Single Paper)

Eline Decraene (Presenting Author); Maribel Montero Perez (Co-Author); Hilde Van Keer (Co-Author)

Effects of shared reading videos on kindergarteners' word knowledge and story comprehension (Single Paper)

Roel van Steensel (Presenting Author); Bjorn de Koning (Co-Author)

Technology use in family literacy programs: A meta-analysis (Single Paper)

Romina de Lima (Presenting Author); Bjorn de Koning (Co-Author); Arends Lidia (Co-Author); Roel van Steensel (Co-Author)

New developments in shared reading research (Symposium)

A systematic review on the benefits of wordless picture books for children's development (Single Paper)

Wenckje Jongstra (Presenting Author); Claire Goriot (Co-Author); Lotte Mensink (Co-Author)

### Session E 09 10:30–12:00 Location: SR 15.15

### Teacher Training and Professional Development

### Chair

Theresa Bauer

Does cueing in video-based cases enhance teachers' noticing of disruptions and their self-efficacy? (Roundtable)

Isabel Althen (Presenting Author); Jessica Fischer (Co-Author); Theresa Büchler (Co-Author); Martin Merkt (Co-Author)

Development and Design of Effective Adaptive Online Professional Development Courses for Teachers (Roundtable)

Nina Udvardi-Lakos (Presenting Author); Armin Fabian (Co-Author); Fitore Morina (Co-Author); Ulrich Trautwein (Co-Author); Tim Fütterer (Co-Author)

Developing a video-based teacher training course for economics (Roundtable) Miriam Lechner (Presenting Author); Stephanie Moser (Co-Author); Manuel Förster (Co-Author); Andre Schulz (Co-Author); Doris Lewalter (Co-Author); Alexandra Ochs (Technical University of Munich)

Session E 10 10:30–12:00 Location: SR 15.22

### Fostering Learning and Instruction

### Chair

Stefanie Rach

Enhancing content-based secondary English in Switzerland through insights from immersion teachers (Roundtable)

Lynn Williams (Presenting Author)

Observing memory-relevant instruction, developing a coding system for both teachers and researchers (Roundtable)

Marloes van Roon (Presenting Author); Wilfried Admiraal (Co-Author); Linda van den Bergh (Co-Author); Dineke Tigelaar (Co-Author)

Teacher training: fostering students' potential according to their learning patterns (Roundtable)

Anna Ciraso-Calí (Presenting Author); Jose Reinaldo Martinez-Fernandez (Co-Author); Carla Quesada-Pallarès (Co-Author); Gustavo Figueiredo (Co-Author); Ruben Hernández Escorcia (Co-Author); Mariana Rebollar-Sánchez (Co-Author); Shirley Méndez (Co-Author); Gemma Utrera (Co-Author)

### Session E 11 10:30-12:00 Location: SR 15.48

### Academic learning, professional learning and lifelong learning

### Chair

Martin Rehm

Symbolic rules of order: A replication and extension of Gattas et al. (2021) (Poster Presentation)

Erika Ikeda (Presenting Author); Michael Slipenkyj (Co-Author); Ian Lyons (Co-Author)

Preparing Students for Lifelong Learning and Personal Development: Competencies and Interventions (Poster Presentation)

Rani Dujardin (Presenting Author); Lynn Van den Broeck (Co-Author); Greet Langie (Co-Author)

Enhancing Soft Skills in Higher Education: The Role of Human Services Internship Supervision (Poster Presentation)

stephanie hovington (Presenting Author); Janie Lépine (Co-Author)

Active Learning and the Impact of Choice (Poster Presentation)

Anushari Wathiyage Don (Presenting Author); Angeline Stoll Lillard (Co-Author); Garvin Brod (Co-Author); Azzurra Ruggeri (Co-Author)

The Role of Professional Learning in Teachers' Emphasis on ICT Integration in Teaching (Poster Presentation)

Sahsenem Öz (Presenting Author); Kaisa Leino (Co-Author); Mikko Niilo-Rämä (Co-Author); Raija Hämäläinen (Co-Author)

Interactive tool when preparing to teach controversial issues (Poster Presentation) Fredrik Portin (Presenting Author)

Session E 12 10:30–12:00 Location: SR 15.23

# Collaborative and Self-Regulated Learning in Cultural Context

### Chair

Julie Cohen

Cross cultural comparisons of tool innovation: findings and methodological challenges (Roundtable)

Bruce Rawlings (Presenting Author)

Uncovering Effective Mechanisms for Self-Directed Learning in Flexible Higher Education (Roundtable)

Debby Weerlink (Presenting Author); Kelly Beekman (Co-Author); Tamara Schilt-Mol (Co-Author); Desirée Joosten-ten Brinke (Co-Author)

How do differences in prior knowledge affect modes of social regulation in collaborative learning? (Roundtable)

Isis Tunnigkeit (Presenting Author); Sebastian Strauss (Co-Author); Julia Eberle (Co-Author); Nikol Rummel (Co-Author)

# Session E 13 10:30–12:00 Location: HS 15.05

# A micro-ecological examination of collaborative learning: multimodal and process-oriented approaches

Chair

Hanni Muukkonen

Discussant

Lina Markauskaite

Organiser

Crina Damsa

A micro-ecological examination of collaborative learning: multimodal and process-oriented approaches (Invited Symposium)

Navigating team dynamics: Applying three measure principles to study adaptation under team stress (Single Paper)

Piet Van den Bossche (Presenting Author); Steffi Sassenus (Co-Author); Karolien Poels (Co-Author)

Examining collaboration dynamics in team-based simulation and feedback through multimodal data (Single Paper)

Crina Damsa (Presenting Author); Daniel Sanchez (Co-Author); Hugh Alexander von Arnim (Co-Author); Lena Gunteberg Heyn (Co-Author); Edda Aslaug Johansen (Co-Author); Susanne Olesen (Co-Author); Ellen Wesenberg Larsen (Co-Author); Carmen Louwerens (Co-Author); Hilde Eide (Co-Author); Rachelle Esterhazy (Oslo Metropolitan University)

AI-mediated collaboration on challenge scenarios: Interactional practices and critical engagement (Single Paper)

Hanni Muukkonen (Presenting Author); Anni silvola (Co-Author); Anouschka van Leeuwen (Co-Author); Anceli Kaveri (Co-Author); Jeroen Janssen (Co-Author); Joonas Merikko (Annie Advisor / University of Helsinki)

Investigating the temporality of group engagement dynamics toward intellectual progress (Single Paper)

Toni Rogat (Presenting Author); Britte Cheng (Co-Author); Temitope F. Adeoye (Co-Author); Anne Traynor (Co-Author); Alexandria Holmes (Purdue University); Cindy Hmelo-Silver (Indiana University)

### Session E 14 10:30–12:00 Location: HS 02.11

### Spontaneous mathematical focusing tendencies in the development of mathematical skills

Chair

Jake McMullen

Discussant

Wim Van Dooren

Spontaneous Focusing On Numerical Order as a predictor of early numeracy (Single Paper)

Minna Hannula-Sormunen (Presenting Author); Heidi Harju (Co-Author); Cristina Nanu (Co-Author)

Twice as many! How the recognition of multiplicative relations in mathematical situations develops (Single Paper)

Hilma Halme (Presenting Author); Minna Hannula-Sormunen (Co-Author); Jake McMullen (Co-Author)

"I need to follow the numbers" - Towards a broader view of Spontaneous Focusing On Numerical Order (Single Paper)

Heidi Harju (Presenting Author); Lore Van Belle (Co-Author); Wim Van Dooren (Co-Author); Jo Van Hoof (Co-Author)

What is the best way to measure spontaneous focusing on numerosity (SFON)? (Single Paper)

Isabelle Duss (Presenting Author); Bettina Wohlfender (Co-Author); Noemi Gloor (Co-Author); Tugce Aras (Co-Author); Miriam Compagnoni (Co-Author); Elisabeth Moser Opitz (Co-Author)

Spontaneous mathematical focusing tendencies in the development of mathematical skills (Invited Symposium)

Session E 15 10:30-12:00 Location: HS 44.11

Assessing student knowledge in learning study and lesson study: Directions towards a stable ground

Chair

Discussant Sui Lin Goei

Ann-Sofie Jägerskog

Using students' mathematical reasoning to evaluate teachers' participation in lesson study (Single Paper)

Maria Vrikki (Presenting Author); Leonidas Kyriakides (Co-Author)

When both sides benefit: The Hong Kong model of assessing student knowledge in learning study (Single Paper)

Wai Ming Cheung (Presenting Author); Serene Chan (Co-Author); Hector W. H. Tsang

Qualitative evaluation of written and oral material in learning study (Single Paper) Malin Tväråna (Presenting Author)

Challenges and possibilities of knowledge assessment in learning study (Single Paper) Ahoo Shokraiefard (Göteborgs Universitet); Ake Ingerman (University of Gothenburg); Ulf Ryberg (University of Gothenburg)

Assessing student knowledge in learning study and lesson study: Directions towards a stable ground (Invited Symposium)

Session E 16 10:30-12:00 Location: HS 15.14

### Scaffolding Learning and Professional Development in Simulations

Chair

Helen Jossberger

Discussant

Raija Hämäläinen

Organiser

Andreas Rausch: Dorothy

Duchatelet

Scaffolding Learning and Professional Development in Simulations (Invited Symposium)

Using Scaffolds in Real-Life and Virtual Reality (VR) Simulations for Enhanced Police Training (Single Paper)

Marcella Hoogeboom (Co-Author); Amber van Kampen (University of Twente)

Validating Stealth Assessment in Adaptive Immersive-VR Training for Complex Skills (Single Paper)

Gilles Obourdin (Presenting Author); Tine van Daal (Co-Author); Sven De Maeyer (Co-Author); Piet Van den Bossche (Co-Author)

Personalized Prompts to Support Problem-Solving in the Digital Office Simulation LUCA (Single Paper)

Herbert Thomann (Presenting Author); Viola Deutscher (Co-Author)

A Scaffolding Design Matrix: 20 Key Features for Analysing and Designing Scaffolding in Simulations (Single Paper)

Helen Jossberger (Presenting Author); Andreas Rausch (Co-Author); Dorothy Duchatelet (Co-Author); Charlott Sellberg (Co-Author)

### Session E 17 10:30-12:00 Location: HS 01.15

# From Peer-Feedback to Learning: Understanding and Supporting the Phases of Provision and Reception

Chair

David Zamorano

Discussant

Jan-Willem Strijbos

Organiser

Julia Hornstein

How Do Students Process and Use Peer-Feedback? (Single Paper)

Florence Van Meenen (Presenting Author); Nicolas Masson (Co-Author); Liesje Coertjens (Co-Author)

Understanding Peer-Feedback Uptake: The Role of Peer-Feedback Features and Literacy (Single Paper)

Xingshi Gao (Presenting Author); Omid Noroozi (Co-Author); Christian Schunn (Co-Author); Judith Gulikers (Co-Author); Harm Biemans (Co-Author); Seyyed Kazem Banihashem (Co-Author)

Comparing Two Phases of Peer-Feedback, Provision and Reception: From Outcomes to Internal Processes (Single Paper)

David Zamorano (Presenting Author); Ernesto Panadero (Co-Author); Maryam Alqassab (Co-Author); Alejandro Amillano Solano (University of Deusto)

Scaffolding the Peer-Feedback Process: How Can the Peer-Feedback Process Be Effectively Supported? (Single Paper)

Julia Hornstein (Presenting Author); Martin Greisel (Co-Author); Ingo Kollar (Co-Author)

From Peer-Feedback to Learning: Understanding and Supporting the Phases of Provision and Reception (Invited Symposium)

Session E 18 10:30–12:00 Location: HS 02.23

### Meet the EARLI Editors

New Perspectives on Learning and Instruction (Single Paper)

Isabel Raemdonck (Presenting Author); Minkang Kim (Presenting Author)

Meet the EARLI Editors (Invited Symposium)

Learning in Context (Single Paper)

Debra Myhill (Presenting Author)

Learning and Instruction (Single Paper)

Gert Rijlaarsdam (Presenting Author)

Frontline Learning Research (Single Paper)

Nina Bonderup Dohn (Presenting Author)

Educational Research Review (Single Paper)

Hans Gruber (Presenting Author)

Session E 19 10:30-12:00 Location: HS 03.01

# AI-Based Assessment of Teaching and Learning: Advances and Challenges Using Multimodal Data

### Chair

Tim Fütterer

### Discussant

Inge Molenaar

# Which Feedback Should we Give to Whom: Analyzing Student's Differences in Revision Processes (Single Paper)

Thorben Jansen (Presenting Author); Hannah Pünjer (Co-Author); Jonathan Schaller (Co-Author); Lars Höft (Co-Author)

# Human or AI Teacher: A Gaze-Based Comparison of Students' Behaviour in a Multisensory System (Single Paper)

Kshitij Sharma (Presenting Author); Giulia Cosentino (Co-Author); Jacqueline Anton (Co-Author); Mirko Gelsomini (Co-Author); Dor Abrahamson (Co-Author); Michail Giannakos (Co-Author)

# Human and Automated Ratings: A Methodology for Evaluating Double Scoring in Classroom Observations (Single Paper)

Jonathan Foster (Presenting Author); Matthew Korban (Co-Author); James Drimalla (Co-Author); Nursultan Japashov (Co-Author); Peter Youngs (Co-Author); Ginger Watson (Co-Author); Scott T. Acton (Co-Author)

# Validating Automated Assessment of Teaching Effectiveness Using Multimodal Data (Single Paper)

Tim Fütterer (Presenting Author); Ruikun Hou (Co-Author); Babette Bühler (Co-Author); Efe Bozkir (Co-Author); Courtney Bell (Co-Author); Enkelejda Kasneci (Co-Author); Peter Gerjets (Co-Author); Ulrich Trautwein (Co-Author)

AI-Based Assessment of Teaching and Learning: Advances and Challenges Using Multimodal Data (Invited Symposium)

Session E 20 10:30–12:00 Location: SR 15.44

# Enhancing learning through instructional design, metacognition and socio-cognitive factors

# Chair

Sabine Seufert

Exploring Young Learners' SRL through Adaptive Metacognitive Prompting (Poster Presentation)

Rebecca Pape (Presenting Author); Joachim Thomas (Co-Author)

Entrepreneurially oriented immigrant-origin youth: Related factors and implications for schools (Poster Presentation)

Rekar Abdulhamed (Presenting Author); Kirsti Lonka (Co-Author)

The indirect effect of retrieval tasks: On the mediational role of metacognitive learning strategies (Poster Presentation)

Florian Hahne (Co-Author); Mario de Jonge (Co-Author); Veit Kubik (Co-Author); Alina Roensch (Bielefeld University)

Transfer of Trained Task-Selection Skills: Cognitive, Social, and Motivational Processes (Poster Presentation)

Jane Pieplenbosch (Presenting Author); Vincent Hoogerheide (Co-Author); Gesa van den Broek (Co-Author); Florence Lucas (Co-Author); Barbara Flunger (Co-Author); Tamara Van Gog (Co-Author)

### Designing Blended Learning Environments (Poster Presentation)

Marco Marcellis (Presenting Author); Jimmy Frerejean (Co-Author); Bert Bredeweg (Co-Author); Saskia Brand-Gruwel (Co-Author); Jeroen Van Merrienboer (Co-Author)

Mapping the Concept: A Scoping Review of the Empirical Research on Students' Instructional Knowledge (Poster Presentation)

Morane Stevens (Presenting Author); Fien Depaepe (Co-Author); Jan Elen (Co-Author)

### Session E 21 10:30-12:00 Location: HS 01.14

### Beliefs, Equity, Agency and Decision-Making

### Chair

Kari-Anne Bottegård Næss

The development of student learning agency in primary and lower secondary education (Single Paper)

Roosa Yli-Pietilä (Presenting Author); Pihla Rautanen (Co-Author); Tiina Soini-Ikonen (Co-Author); Kirsi Pyhältö (Co-Author); Janne Pietarinen (Co-Author)

Who Benefits From Choice? Effects of Choice on Interest and Performance in Mathematics (Single Paper)

Johanna Schoenherr (Presenting Author); Amedee Martella (University of Georgia)

Gender gap in Computational Thinking learning and group's gender stereotypes: an explorative study  $(Single\ Paper)$ 

Costanza Padova (Presenting Author); Gabriele Pozzan (Co-Author); Tullio Vardanega (Co-Author); Barbara Arfé (Co-Author); Chiara Montuori (Universita di Padova)

Understanding children's attentive and affective processes in game-based learning (Single Paper)

Kshitij Sharma (Presenting Author)

Session E 22 10:30–12:00 Location: SR 03.K1

### Barriers and Boosters for Student Success

### Speaker

Maja Stegenwallner-Schütz

Student learning success and wellbeing during Covid-19 – Predictors and relationship (Single Paper)

Julian Brauchle (Presenting Author); Valentin Unger (Co-Author)

Procrastination in higher education online learning – a systematic literature review (Single Paper)

Anne-Madeleine Kraft (Presenting Author); Lars Meyer-Jenßen (Co-Author); Julia Klug (Co-Author); Björn Kröske (Co-Author)

Personality, Substance Use and Academic Self-Regulation: Exploring Barriers to Student Success (Single Paper)

Ramin Rostampour (Co-Author); Sherry Stewart (Co-Author); Nazanin Babaei (Co-Author); Allyson Hadwin (University of Victoria)

Exploring the impact of wellbeing and engagement on academic performance (Single Paper)

Florence Gabriel (Presenting Author); Rebecca Marrone (Co-Author); Benjamin Lam (Co-Author); Abhinava Barthakur (Co-Author); Sally Brinkman (Co-Author); Shane Dawson (University of South Australia)

Session E 23 10:30–12:00 Location: HS 11.03

### Instructional Design Strategies for Learning

### Chair

Aneeza Pervez

Designing and Implementing Neuropedagogy-based Multidisciplinary Learning Grids (Single Paper)

Debora Marchak (Presenting Author); Inna Shvarts-Serebro (Co-Author)

Constructive Retrieval in the Physics Curriculum - Findings from Two Classroom Experiments (Single Paper)

Dwayne Lieck (Presenting Author); Tino Endres (Co-Author); Claudia von Aufschnaiter (Co-Author); Andreas Vorholzer (Co-Author); Alexander Eitel (Co-Author); Alexander Renkl (Co-Author)

Improving Learning from Correcting Erroneous Worked-Out Examples with Refutation Texts (Single Paper)

Christa Asterhan (Presenting Author)

Fostering Epistemic Reasoning in Evidence Evaluation: The Impact of Instruction on Undergraduates (Single Paper)

Hiroki Oura (Presenting Author); Clark Chinn (Co-Author); Etsuji Yamaguchi (Co-Author); Toshio Mochizuki (Waseda University)

Session E 24 10:30–12:00 Location: HS 15.11

# Measuring skills in less considered domains

### Chair

Nadir Díaz Simón

Are Digital Competence Assessments Measuring Up? A Systematic Review and Validation Challenges (Single Paper)

Daniela Decker (Presenting Author); Nawael Niazy (Co-Author); Daria Benden (Co-Author); Fani Lauermann (Co-Author)

Measuring Skill Gaps in the Modern Workforce: Tools, practices and challenges (Single Paper)

Paavo Räty (Presenting Author); Greta Braun (Co-Author); Pauliina Rikala (Co-Author); Petri Ihantola (Co-Author); Lauri Kettunen (Co-Author); Raija Hämäläinen (Co-Author)

Seeing the Classroom as a Stage - the Dramaturgical Method. Analysing teaching and learning  $({\rm Single\; Paper})$ 

Fride Lindstøl (Presenting Author); Jannike Bakke (Presenting Author)

Session E 25 10:30–12:00 Location: HS 15.13

Integrating AI in Education: Perspectives on Peer Learning, Teacher Collaborations, and Feedback

Chair

Elisabeth Mayweg; Ute Mertens **Discussant** 

Christopher Neil Prilop

Integrating AI in Education: Perspectives on Peer Learning, Teacher Collaborations, and Feedback (Symposium)

The Role of Provider Information and Message Quality for Student Bias Towards LLM vs Human Feedback (Single Paper)

Livia Kuklick (Presenting Author); Theresa Ruwe (Co-Author); Elisabeth Mayweg (Co-Author)

Teacher versus AI-generated Feedback: Experimental Findings on Teachers' Implicit Bias Against AI (Single Paper)

Ute Mertens (Presenting Author); Jennifer Mayer (Co-Author); Marlene Steinbach (Co-Author); Johanna Fleckenstein (University of Hildesheim); Thorben Jansen (Leibniz-Institut für die Pädagogik der Naturwissenschaften und Mathematik)

 $\label{thm:collaboration} \textbf{Teacher-AI collaboration on curriculum adaptivity in primary schools' mathematics education (Single Paper)}$ 

Zowi Vermeire (Presenting Author); Susanne de Mooij (Co-Author); Carolien Knoop-van Campen (Co-Author); Inge Molenaar (Co-Author)

Supporting Peer Learning with AI in Higher Education: A Systematic Review (Single Paper)

Bo Sichterman (Presenting Author); Omid Noroozi (Co-Author); Josien Boetje (Co-Author); Stan van Ginkel (Co-Author); Johan Versendaal (Co-Author)

Session E 26 10:30–12:00 Location: Festsaal

### International Perspectives on Students' Perception of Inclusion

Chair

Katharina-Theresa Lindner

Discussant

Hannu Savolainen

Explaining discrepancies in teacher reports and self-reports of students' perceptions of inclusion (Single Paper)

Carmen Zurbriggen (Presenting Author); Susanne Schwab (Co-Author); Isabelle Kalkusch (Co-Author); Alex Neuhauser (Co-Author); Kevin Simoes Loureiro (Co-Author); Andrea Lanfranchi (Co-Author); Peter Klaver (Co-Author)

School-placement and school well-being: The experiences of Norwegian families with ADHD (Single Paper)

Jon Erik Finnvold (Presenting Author)

Perceived Inclusion, Discrimination & Adolescent Well-being: A Structural Equation Modeling Approach (Single Paper)

Jairo Rodríguez-Medina (Presenting Author); Clara González Sanguino (Co-Author); Sara Castrillo-San Mamés (Co-Author); Alba Ayuso Lanchares (University of Valladolid)

International Perspectives on Students' Perception of Inclusion (Symposium)

Perception of Inclusion in Different Classroom Settings: Perspectives of Students and Their Teachers (Single Paper)

Alexandra Pirker (Presenting Author); Katharina-Theresa Lindner (Co-Author); Verena Letzel-Alt (Co-Author); Susanne Schwab (Co-Author)

Session F 01 12:15–13:45 Location: SR 15.48

### Teaching Practices in Different Domains and Settings

### Chair

Øystein Gilje

Reconceptualising how to internationalise: Using dialogue to promote intercultural competence. (Poster Presentation)

Johanna Einfalt (Presenting Author)

Citizenship Education as Interdisciplinary Principle in Austrian Curricula: Interreligious Analysis (Poster Presentation)

Asligül Aysel (Presenting Author); Petra Juen (Presenting Author)

Self-efficacy in teacher education programs: stimulated by profession-related tasks? (Poster Presentation)

Stefanie Rach (Presenting Author)

Enhancing Motivation and Self-Concept in Science: Designing Inclusive Educational Environments (Poster Presentation)

Martina Graichen (Presenting Author); Linda Hinderer (Co-Author); Silke Mikelskis-Seifert (Co-Author)

Exploring Pre-service Teacher's Video-based Collaborative Diagnostic Reasoning (Poster Presentation)

Sebastian Tews (Presenting Author); Freydis Vogel (Co-Author)

Pre-service teachers' attitudes towards religious tolerance and their future teaching practices (Poster Presentation)

Anne Suryani (Presenting Author); Ahmad Bukhori Muslim (Co-Author)

Session F 02 12:15–13:45 Location: SR 15.43

# Teacher Instructional Practices and Student Learning and Wellbeing

### Chair

Anita Lopez-Pedersen

Natural and supernatural explanations in Greek children's conversations with their parents (Poster Presentation)

Anastasia/Natassa Kyriakopoulou (Presenting Author); Ageliki Nicolopoulou (Co-Author); Irini Skopeliti (Co-Author); Katerina Parise (Co-Author)

A systematic analysis of triadic classroom interactions: Promoting high quality dialogues (Poster Presentation)

Maria Vrikki (Presenting Author); Maria Evagorou (Co-Author)

VET teachers' instructional patterns in simulation-based training. A sociomaterial perspective (Poster Presentation)

Giulia Messina Dahlberg (Presenting Author); Susanne Gustavsson (Co-Author)

Student wellbeing in the upper secondary school transition - The function of social support (Poster Presentation)

Jenni Sullanmaa (Presenting Author); Lotta Tikkanen (Co-Author); Sanna Ulmanen (Co-Author); Kirsi Pyhältö (Co-Author)

Children's Differentiation Between Human and Supernatural Agents: Social and Religious Learning (Poster Presentation)

Irini Skopeliti (Presenting Author); Anastasia/Natassa Kyriakopoulou (Co-Author); Rania Vgenopoulou (Co-Author); Ageliki Nicolopoulou (Co-Author); Katerina Parise (Co-Author)

### Session F 03 12:15–13:45 Location: SR 15.45

### Students' Motivation and Emotional Awareness

### Chair

Verena Pfeiffer

Exploring Voice, Face and Heart Rate Markers of Teacher Autonomy-supportive and Controlling Style (Poster Presentation)

Athanasios Mouratidis (Co-Author); FOTEINI ARVANITIDOU (Co-Author); CHRYSO-VALANTOU ATHANASIADOU (Co-Author); Aikaterini Michou (University of Ioannina)

Differences in student- and teacher-perceived (de)motivating teaching: link with student motivation (Poster Presentation)

Katrien De Cocker (Presenting Author); Nele Van Doren (Co-Author); Arne Bouten (Co-Author); Tom De Clerck (Co-Author)

When time and energy cost math results – students motivation to learn basic algebra concepts (Poster Presentation)

Liina Malva (Presenting Author); Eve Kikas (Co-Author); Danial Hooshyar (Co-Author)

Does Support Meet the Need? Parental Support on Students' Psychological Need Satisfaction in Imvros (Poster Presentation)

Servet Altan (Presenting Author); ELENI VASILAKI (Co-Author); Aristea Mavrogianni (Co-Author); Georgios Vleioras (Co-Author); Mastrothanasis Konstantinos (Co-Author); Marinos Anastasakis (Co-Author); AIKATERINI VASIOU (University of Crete)

Enhancing youth motivation for STEM through extracurricular activities (Tiny house construction) (Poster Presentation)

Christophe Kegels (Presenting Author); Valérie Thomas (Co-Author)

Integrating Critical Emotional Awareness through Community Science Data Talks (Poster Presentation)

Imogen Herrick (Presenting Author)

### Session F 04 12:15–13:45 Location: SR 15.42

### Teacher Motivation and Student Engagement

### Chair

Esther Canrinus

Positive teacher-student relationship promotes students' engagement in higher education (Poster Presentation)

Yi Wang (Presenting Author); Vivian Wing Yan LEE (Co-Author); Ronnel Bornasal King (Co-Author)

Increasing Science Motivation & Performance with a Utility-Value Intervention in Primary Education (Poster Presentation)

Erik Roosken (Presenting Author); Kate Xu (Co-Author); Renate de Groot (Co-Author)

Teacher empathy messages: Relations with teacher enthusiasm and student grades (Poster Presentation)

Elisa Santana Monagas (Presenting Author); Juan L. Núñez (Co-Author); Jaime León (Co-Author)

Exploring the Interplay of Achievement Goals and Emotions While Learning with MetaTutor (Poster Presentation)

Annamarie Brosnihan (Presenting Author); Megan Wiedbusch (Co-Author); Cameron Marano (Co-Author); Tara Delgado (Co-Author); Milla Sherman (Co-Author); Roger Azevedo (Co-Author)

How Engagement Mediates Math Educational Technology Features' Impact (Poster Presentation)

Maria-Martine Oppmann (Presenting Author); Maik Beege (Co-Author); Sarah Hofer (Co-Author); Frank Reinhold (Co-Author)

Does academic self-worth contingency moderate the association between perfectionism and engagement? (Poster Presentation)

Antti Pulkka (Presenting Author)

Session F 05 12:15–13:45 Location: SR 15.44

### Feedback, motivation and reflection across contexts and methods

### Speaker

Maiki Vanahans

Promoting meaningful reflection: The mentor's role (Poster Presentation)

Joedith López-Cuello (Presenting Author); Anke Sambeth (Co-Author); Sjir Uitdewilligen (Co-Author)

Goal Orientations of Vocational Education Students At Study Start: Results from a Cluster Analysis (Poster Presentation)

Kim Méliani (Presenting Author); Matthias Wyrwal (Co-Author); Kristina Kögler (Co-Author)

Self-chosen feedback in computer-based learning: A systematic review of literature (Poster Presentation)

Friederike von Kienitz (Presenting Author); Fynn Töllner (Co-Author); Maike Hagena (Co-Author); Michael Besser (Co-Author)

Adaptation and Technological Challenges in Hybrid University Environments (Poster Presentation)

Natalia Salas (Presenting Author); Francisca Beroiza (Co-Author); Alejandro Vega (Universidad Central de Chile)

The Impact of the Affective Feedback on Multimedia Learning: An Eye-Tracking Study (Poster Presentation)

Fangzheng Zhao (Presenting Author); Richard Mayer (Co-Author)

More Than Feedback A Qualitative Study of Feedback Interpretation Across Levels of Self-efficacy (Poster Presentation)

Xiaomeng Zhang (Presenting Author); Yaping Liu (Presenting Author); Choo Mui Cheong (Co-Author)

Session F 06 12:15–13:45 Location: HS 15.05

# Advancing Research on Learning and Instruction through Meta-Meta-Analyses: Insights and Innovations

### Chair

Valentin Emslander

### Discussant

Michael Schneider

Who Am I? A Second-Order Meta-Analytic Review of Correlates of the Self in Childhood and Adolescence (Single Paper)

Jennifer Meyer (Presenting Author); Thorben Jansen (Co-Author); John Hattie (Co-Author); Jens Möller (Co-Author)

Advancing Systematic Moderator Selection in Meta-Analyses of Educational Research (Single Paper)

Maximilian Knogler (Presenting Author); Meg Farrell (Co-Author); Tina Seidel (Co-Author)

Seeing what is (not) there—A systematic review of meta-meta-analyses in education (Single Paper)

Valentin Emslander (Presenting Author); Lisa Bardach (Co-Author); Emmelin Sahra Dåvang (Co-Author); Ronny Scherer (Co-Author)

Decline effects in the empirical sciences: Meta-meta-analytic evidence from (Educational) Psychology (Single Paper)

Benedikt Steininger (Presenting Author); Magdalena Siegel (Co-Author); Raimund Bühler (Co-Author); Junia Sophia Nur Eder (Co-Author); Laura Sophia Schock (Co-Author); Jelte M. Wicherts (Co-Author); Jakob Pietschnig (Co-Author)

Advancing Research on Learning and Instruction through Meta-Meta-Analyses: Insights and Innovations (Symposium)

Session F 07 12:15–13:45 Location: HS 02.11

Improving PCK: insights from Teacher Education in History, Geography, and Biology in Five Countries

Chair

Wouter Smets **Discussant** 

Fien Depaepe Organiser

Eefje Smit; Hanneke Tuithof; Martin Nitsche

Improving PCK: insights from Teacher Education in History, Geography, and Biology in Five Countries (Symposium)

Why an integrated approach matters: Research on PCK of history teachers in German-speaking countries (Single Paper)

Martin Nitsche (Presenting Author)

Improving PCK: insights from Teacher Education in History, Geography, and Biology in Five Countries (Single Paper)

Eefje Smit (Presenting Author)

Disentangling Pre-service History Teachers' Pedagogical Content Knowledge (Single Paper)

Hanneke Tuithof (Presenting Author); Wouter Smets (Co-Author)

Michiel Dam (Co-Author); Albert Logtenberg (Amsterdam University of Applied Sciences)

Session F 08 12:15–13:45 Location: HS 02.01

Dyadic Relationships at School from a Cross-Cultural Perspective

Chair

Mathias Dehne **Discussant**Jantine Spilt

Affective, Dyadic Principal–Teacher Relationships in Germany and Spain: A Cross-Cultural Comparison (Single Paper)

Mathias Dehne (Presenting Author); Alexander Groeschner (Friedrich Schiller University Jena)

Young Children's Relationship Drawings of Their Teacher: A Cross-Country Comparison (Single Paper)

Debora Roorda (Presenting Author); Mengdi Chen (Co-Author)

Adapting the Student-Teacher Relationship Scale for Cross-Cultural Sensitivity in Belgium and China (Single Paper)

Canmei Xu (Presenting Author); Mariette Huizinga (Co-Author); Polina Kartashova (Co-Author); Ruwen Liang (Co-Author); Dieter Baeyens (Co-Author)

 $\label{lem:Loneliness and Teacher-Student Relationships in Children and Adolescents: Multilevel Meta-Analyses (Single Paper)$ 

Yixuan Zheng (Presenting Author)

Dyadic Relationships at School from a Cross-Cultural Perspective (Symposium)

Session F 09 12:15–13:45 Location: HS 46.01

Supporting preschoolers' patterning competences: teaching practices and professional development

Chair
Nore Wijns
Discussant
Camilla Gilmore
Organiser

Joke Torbeyns

Supporting preschoolers' patterning competences: teaching practices and professional development (Symposium)

Talking about patterns: Teacher-child interaction during picture book reading (Single Paper)

Birgit Kinnaer (Presenting Author); Eveline Wauters (Co-Author); Hilde Van Keer (Co-Author); Lieven Verschaffel (Co-Author); Joke Torbeyns (Co-Author)

Patterns in patterning practice with 4- to 5-year-old children in England (Single Paper)

Catherine Gripton (Presenting Author); Gabriel Lee (Co-Author)

The power of pattern: communities of practice as reciprocal professional development (Single Paper)

Helen Thouless (Presenting Author); Sue Gifford (Co-Author); Alison Borthwick (Independent Consultant)

Analysis of 5-6-year-olds' responses to repeating, growing and spatial patterning tasks (Single Paper)

Joanne Mulligan (Presenting Author)

Session F 10 12:15–13:45 Location: HS 15.03

# European Perspectives on High Ability and Talent Development

Chair

Franzis Preckel

Discussant

Roland H. Grabner

Social and Environmental Awareness in Gifted and Non-Gifted Students' Personality Development (Single Paper)

Mojca Juriševič (Presenting Author); Urška Žerak (Co-Author); Neža Podlogar (Co-Author)

Academic Help-Seeking and Perfectionism in Talented Adolescents: The Impact of an Enrichment Program (Single Paper)

Eleftheria Gonida (Presenting Author); Panayiota Metallidou (Co-Author); Center for Talented Youth Center for Talented Youth (Co-Author)

Development of Students' Need for Cognition and Interests in Gifted as Compared to Regular Classes (Single Paper)

Franzis Preckel (Presenting Author); Moritz Breit (Co-Author); Vsevolod Scherrer (Co-Author)

 $\textbf{European Perspectives on High Ability and Talent Development} \ (\textbf{Symposium})$ 

Development of Motivational Profiles among High-Ability and Typical Students (Single Paper)

Alicia Ramos (Presenting Author); Maarten Vansteenkiste (Co-Author); Jeroen Lavrijsen (Co-Author); Bart Soenens (Co-Author); Karine Verschueren (Co-Author)

# Session F 11 12:15–13:45 Location: HS 03.01

# Lessons learned from teacher professional development initiative to enhance teaching quality

Chair Maren Tvedt Discussant

Karine Verschueren

Organiser

Sigrun Ertesvåg

Lessons learned from teacher professional development initiative to enhance teaching quality (Symposium)

The impact of teacher coaching on teacher-student interaction and student engagement (Single Paper)

Sigrun Ertesvåg (Presenting Author); Maren Tvedt (Co-Author)

Improving Interaction Quality in Inclusive Classrooms: Impact of a Video-Based Coaching Intervention (Single Paper)

Katharina Antognini (Presenting Author); Simona Altmeyer (Co-Author); Ramona Eberli (Co-Author); Luciano Gasser (Co-Author)

Professional development as a shift from MY teaching to OUR teaching (Single Paper)

Marcus Samuelsson (Presenting Author)

Enhancing classroom interaction with video-based coaching intervention in teacher training (Single Paper)

MARJA-KRISTIINA LERKKANEN (Presenting Author); Sanni Pöysä (Co-Author); Eija Pakarinen (Co-Author)

# Session F 12 12:15–13:45 Location: HS 11.02

# Positive Parenting: Emotion Regulation and Playfulness Support Children's Emotional Development

Chair

Anke Maria Weber; Ziwen Teu-

Discussant

Elisa Oppermann

Positive Parenting: Emotion Regulation and Playfulness Support Children's Emotional Development (Symposium)

Different Impacts between Parent's and Peer's Emotion Regulation Towards Children and Adolescents (Single Paper)

Qichen Wang (Presenting Author); Su Yanjie (Co-Author)

Exploring the Complexity of Emotions in Parent-Child Interactions Using Intensive Longitudinal Data (Single Paper)

Ziwen Teuber (Presenting Author); Gesine Jordan (Co-Author); Sonsoles López-Pernas (Co-Author)

The Contribution of Parents' Playfulness to their Children's Emotional Competence (Single Paper)

Maayan Shorer (Presenting Author)

Adult playfulness and children's psycho-social functioning impact the home learning environment (Single Paper)

Anke Maria Weber (Presenting Author); Katarzyna Bobrowicz (Co-Author); Angélica Mendes (Co-Author); Elizabeth Byrne (Co-Author); Christoph Niepel (Co-Author)

Session F 13 12:15–13:45 Location: Festsaal

Fostering metacognition and SRL among young children: evidence from direct and indirect approaches

Chair

Mélanie Maximino Pinheiro

Discussant

Charlotte Dignath

Fostering self-regulated learning in preschool through dynamic assessment methodologies. (Single Paper)

Mélanie Maximino Pinheiro (Presenting Author); Janete Silva Moreira (Co-Author); Paula Costa Ferreira (Co-Author); Ana Veiga Simão (Co-Author)

Fostering SRL through a parenting experiment: evidence from a large RCT among first graders. (Single Paper)

Mélanie Maximino Pinheiro (Presenting Author); Nina Guyon (Co-Author); Carlo Barone (Co-Author); Grégoire Borst (Co-Author); Elise Huillery (Co-Author)

Fostering metacognition in preschoolers: A teacher's training. (Single Paper)

Lys-Andréa Brunet (Presenting Author); Mélanie Maximino Pinheiro (Co-Author); Grégoire Borst (Co-Author)

Fostering metacognition and SRL among young children: evidence from direct and indirect approaches (Symposium)

How effective are metacognition interventions for young learners? A meta-analytic study. (Single Paper)

Donna Bryce (Presenting Author); Janina Eberhart (Co-Author); Franziska Schäfer (Co-Author)

Session F 14 12:15–13:45 Location: HS 15.12

Transactivity in collaborative learning: Conceptualizations, scaffolding, and learning outcomes

Chair

Freydis Vogel

Discussant

Christa Asterhan

Organiser

Armin Weinberger

Supporting Transactive Communication in Inquiry-Based Learning with a Conversational Agent: (Single Paper)

Hsin-Chueh Chen (Presenting Author); hannie gijlers (Co-Author); Adelson de Araujo (Co-Author); Pantelis M. Papadopoulos (Co-Author)

I-positions as a qualitative tool for transactive talk in computer-supported collaborative learning (Single Paper)

Aaron Peltoniemi (Presenting Author); Joni Lämsä (Co-Author); Sami Lehesvuori (Co-Author); Raija Hämäläinen (Co-Author)

Scaffolding transactivity by prompting novelty and reference in knowledge-heterogeneous groups (Single Paper)

Jara Martens (Presenting Author); Armin Weinberger (Presenting Author); Paulo José Medeiros dos Santos (Co-Author); Freydis Vogel (Co-Author)

Effects of training in transactive communication on students' collaborative learning (Single Paper)

Susanne Jurkowski (Presenting Author); Lukas Mundelsee (Co-Author); Martin Hänze (Co-Author)

Transactivity in collaborative learning: Conceptualizations, scaffolding, and learning outcomes (Symposium)

Session F 15 12:15–13:45 Location: HS 15.02

### Supporting Teacher Well-being: Research and Resources

Chair

Susan Beltman **Discussant** 

Michaela Gläser-Zikuda

Organiser

Rebecca Collie

Supporting Teacher Well-being: Research and Resources (Symposium)

Teachers' coping and COVID: Does an online intervention make a difference for teacher well-being? (Single Paper)

Caroline Mansfield (Presenting Author); Susan Beltman (Co-Author); Tina Hascher (Co-Author); Rebecca Collie (Co-Author)

Developing place-based data-driven interventions to improve teacher resilience and retention (Single Paper)

Steph Ainsworth (Presenting Author); Jeremy Oldfield (Co-Author); Carrie Adamson (Co-Author)

Enhancing Dutch preservice teacher's well-being and resilience (Single Paper)

Marjon Fokkens-Bruinsma (Presenting Author); Irene Poort (Co-Author)

Preservice teacher well-being: Links with general well-being, resilience, and quitting intentions (Single Paper)

Manuela Haldimann (Presenting Author); Tina Hascher (Co-Author); Doreen Flick (Co-Author)

Session F 16 12:15–13:45 Location: HS 11.01

### Formative Assessment in Today's Classrooms: Moving Towards Action

Chair

Sonja Hahn

Discussant

James Slotta

Organiser

Sarah Bichler

Formative Assessment in Today's Classrooms: Moving Towards Action (Symposium)

Decoupling Feedback and Active Follow-Up: Effects on Conceptual Understanding in Physics Classes (Single Paper)

Andreas Lichtenberger (Presenting Author); Sarah Hofer (Co-Author); Elsbeth Stern (Co-Author); Andreas Vaterlaus (Co-Author)

A Roadmap to Automatically Analyzing Graphical Responses in Small Scale Formative Assessments (Single Paper)

Sonja Hahn (Presenting Author); Corinna Hanke In (Co-Author); Sebastian Gross (Co-Author); Leon Hammerla (Co-Author); Ulf Kroehne (Co-Author)

Leveraging Formative Assessment in Science to Foster Integrated Knowledge: A Design-Based Case Study (Single Paper)

Sarah Bichler (Presenting Author); Brian Riordan (Co-Author); Jonathan Lim-Breitbart (Co-Author); marcia linn (Co-Author)

Systematically Reviewing Adaptivity as Linchpin for Formative Assessment in Schools (Single Paper)

Katharina Bach (Presenting Author); Sarah Hofer (Co-Author); Sarah Bichler (Co-Author)

Session F 17 12:15–13:45 Location: HS 25.11

### Predicting and supporting children's reading across development

Chair Chiara Banfi Discussant

Minna Torppa

The role of medium and text structure in young readers' memory for location of key information (Single Paper)

Aisha Futura Tüchler (Presenting Author); Kate Cain (Co-Author)

Evaluating the UiT-ReadWell programme's impact on reading disorders in young Norwegian students (Single Paper)

Trude Nergård-Nilssen (Presenting Author); Line Walquist-Sørli (Co-Author); Bjarte Furnes (Co-Author); Sølvi Grønning Riise (Co-Author); Oddgeir Friborg (Co-Author); Monica melbylervåg (Co-Author)

Identifying promotive and protective factors for reading comprehension success in low SES students (Single Paper)

Maria Psyridou (Presenting Author); MARJA-KRISTIINA LERKKANEN (Co-Author); Minna Torppa (Co-Author)

Predicting and supporting children's reading across development (Symposium)

Beyond acquired skills: Predictors of orthographic and arithmetic fact learning  $({\rm Single~Paper})$ 

Chiara Banfi (Presenting Author); Chiara Valeria Marinelli (Co-Author); Pierluigi Zoccolotti (Co-Author); Karin Landerl (Co-Author)

Session F 18 12:15–13:45 Location: HS 02.23

### The challenges of ensuring equity through differentiation and (special) education support

Chair

Susanne Schwab

Discussant

Carmen Zurbriggen

Organiser

Elisabeth Moser Opitz

The challenges of ensuring equity through differentiation and (special) education support (Symposium)

Educational Transitions of Vulnerable Students from the Perspective of Teachers (Single Paper)

Katharina-Theresa Lindner (Presenting Author); Marie Gischthaler (Co-Author); Alexandra Pirker (Co-Author); Susanne Schwab (Co-Author)

Engaging All Students: The Role of Individual Characteristics, Differentiation, and Autonomy (Single Paper)

Simon Ohl (Presenting Author); Katharina Schnitzler (Co-Author); Hanna Dumont (Co-Author)

Which students are given special education and German as a second language support? (Single Paper)

Eva-Maria Holzer (Presenting Author); Mireille Tabin (Co-Author); Maria Wehren-Mueller (Co-Author); Janina Kraft (Co-Author); Elisabeth Moser Opitz (Co-Author)

Socially Selective Allocation of Curriculum Modifications in Inclusive Mainstream Classrooms (Single Paper)

Robin Benz (Presenting Author); caroline Sahli Lozano (Co-Author)

Session F 19 12:15-13:45 Location: HS 01.15 Understanding and Developing Teacher Professional Vision Chair To see or not to See. Measuring Professional Vision in Language Stimulation of Rebekka Stahnke Pre-Service Teacherstina (Single Paper) Discussant Lien Dorme (Presenting Author); Ruben Vanderlinde (Co-Author) Ilona Södervik Fostering Teachers' PCK through Noticing Activities in a PD Program for In-Service Biology Teachers (Single Paper) Richard Sannert (Presenting Author); Rebekka Stahnke (Co-Author); Moritz Krell (Co-Author) "So many more layers": Characterizing the interwoven nature of noticing for equity (Single Paper) Ethan Rubin (Presenting Author); Elizabeth van Es (Co-Author) Understanding and Developing Teacher Professional Vision (Symposium) Charting co-teachers' visual attention in authentic math lessons (Single Paper)

Session F 20 12:15-13:45 Location: HS 12.01 Expanding our knowledge of factors and contexts to promote inclusive practices Chair Teachers' attitudes towards inclusive education and perceptions of it in video clubs Robbert Smit (Single Paper) Discussant Robbert Smit (Presenting Author); Esther Moll (Co-Author) Laura Landi Investigating Determinants of Teachers' Inclusive Practices (Single Paper) İpek Gülsün (Presenting Author); Olli-Pekka Malinen (Co-Author); Tuomo Virtanen (Co-Author); Hannu Savolainen (Co-Author); Akie Yada (University of Jyväskylä) Expanding our knowledge of factors and contexts to promote inclusive practices (Symposium)

Eeva Haataja (Presenting Author); Reito Visajaani Salonen (Co-Author)

Past Presidents Dinner	$19\text{:}00\text{-}\mathbf{NA}$
Past Presidents Dinner	

Session F 21 12:15-13:45 Location: HS 02.21

# Leveraging Human-AI Collaboration Research to Revolutionize Metacognition and Self-Regulation

Maria Bannert; Roger Azevedo

Discussant Inge Molenaar Leveraging Human-AI Collaboration Research to Revolutionize Metacognition and Self-Regulation (Symposium)

Enhancing Human-AI Collaboration: Using Simulated Learners to Support SRL Across Diverse Contexts (Single Paper)

Roger Azevedo (Presenting Author); Megan Wiedbusch (Co-Author); Annamaria Brosnihan (Co-Author); Cameron Marano (Co-Author); Tara Delegado (Co-Author)

Promoting SRL through AI-based Learning Environments (Single Paper)

Maria Bannert (Presenting Author); Lyn Lim (Co-Author)

Progress and open challenges in learning analytics for self-regulated learning (Single Paper)

Dragan Gasevic (Presenting Author); Mladen Raković (Co-Author); Yizhou Fan (Co-Author); TONGGUANG LI (Co-Author)

Trigger regulation framework guided human-AI collaboration research (Single Paper) Sanna Järvelä (Presenting Author); Joni Lämsä (Co-Author); Márta Sobocinski (Co-Author); Justin Edwards (Co-Author)

Session F 22 12:15-13:45 Location: HS 15.13

# Pre-service teachers' conceptions of their future work in the Nordic countries

Chair

Petri Salo

Discussant

Heidi Hellstrand

Conceptions of success and failure - Finnish pre-service teachers' stories of their future work (Single Paper)

Gunilla Eklund (Presenting Author); Katriina Maaranen (Co-Author); Petri Salo (Co-Author); Jessica Aspfors (Co-Author)

Pre-service Teachers' Conceptions of Success and Failure in a Swedish Context (Single Paper)

Anna Katharina Jacobsson (Presenting Author); Ola Henricsson (Co-Author)

Conceptions of success and failure - Norwegian pre-service teachers' stories of their future work (Single Paper)

Irina Ivashenko Amdal (Presenting Author); Gunilla Eklund (Co-Author); Ingrid Elden (Co-Author); Ola Buan Øien (Co-Author)

Pre-service teachers' conceptions of their future work in the Nordic countries (Symposium)

Researching on pre-service teachers' conceptions of their future work (Single Paper) Petri Salo (Presenting Author)

# Session F 23 12:15–13:45 Location: SZ 15.21

# The Impact of Interventions on Metacognitive Accuracy and Emotional Outcomes

Chair

Corinna Schuster; Rebecca

Krebs

Discussant

Mariette van Loon

The Impact of Interventions on Metacognitive Accuracy and Emotional Outcomes (Symposium)

Beyond the score: how discovering self-assessment accuracy affects emotions and self-efficacy. (Single Paper)

Leire Pinedo (Presenting Author); Javier Fernández (Co-Author); Ernesto Panadero (Co-Author); Gavin Brown (Co-Author)

Do rubrics enhance metacognitive accuracy in writing from multiple texts? (Single Paper)

Corinna Schuster (Presenting Author); Dominik Evangelou (Co-Author); Rebecca Krebs (Co-Author); Marcel Mierwald (Co-Author); Nicola Brauch (Co-Author); Marc Stadtler (Co-Author)

Adaptively faded support for cue utilization and monitoring accuracy in causal relation learning (Single Paper)

Héctor J. Pijeira-Díaz (Presenting Author); Sophia Braumann (Co-Author); Margot van Wermeskerken (Co-Author); Tamara Van Gog (Co-Author); Anique de Bruin (Co-Author)

Does diagramming improve monitoring accuracy of intermediate-length and long texts? (Single Paper)

Stephanie Hepner (Presenting Author); Sophie Oudman (Co-Author); Trevor E. Carlson (Co-Author); Matthew McCrudden (Co-Author); Tamara Van Gog (Co-Author)

# Session F 24 12:15–13:45 Location: HS 44.11

# Enhancing Meaningful Learning through Generative Activities and Desirable Difficulties

Chair

Veit Kubik

Discussant

Steven Pan

Generative Writing to Learn: Can Prompted Journal Writing Enhance Comprehension after 1 Week? (Single Paper)

Veit Kubik (Presenting Author); Markus H. Hefter (Co-Author); Matthias Nückles (Co-Author); Kirsten Berthold (Co-Author)

Do Students' Differences Influence (Lasting) Learning in Distributed Non-Interactive Teaching? (Single Paper)

Heike Russ (Presenting Author); Leonie Sibley (Co-Author); Salome Flegr (Co-Author); Vincent Hoogerheide (Co-Author); Katharina Scheiter (Co-Author); Andreas Lachner (Co-Author); Jochen Kuhn (University of Munich (LMU))

Can the Effects of Generative Drawing on Lasting Learning be Optimized Through Retrieval Practice? (Single Paper)

Seokyoung Kim (Presenting Author); Roman Abel (Co-Author); Philipp Schmiemann (Co-Author); Detlev Leutner (Co-Author); Julian Roelle (Co-Author)

Enhancing Meaningful Learning through Generative Activities and Desirable Difficulties (Symposium)

Benefits and Boundaries of Explaining and Drawing Activities (Single Paper)

Logan Fiorella (Presenting Author); Alexis Capobianco (University of Georgia); Allison J. Jaeger (Mississippi State University)

Session F 25 12:15–13:45 Location: HS 15.14

# Challenges When Measuring Self-Regulated Learning and Modern Approaches to Solve Them

Chair

Samantha Vos

Discussant

Ernesto Panadero

Organiser

Anastasia KItsantas; Noortje Janssen; Sina Gottschlich Challenges When Measuring Self-Regulated Learning and Modern Approaches to Solve Them (Symposium)

Real-Time Insights: Assessing Self-Regulated Learning in Tutoring Sessions Using Microanalysis (Single Paper)

Roberto Pamas (Presenting Author); Anastasia KItsantas (Co-Author); Divya Varier (Co-Author); Christine A. Nardelli (Co-Author); Sahar Wahidi (Co-Author); Haley McKeen (Co-Author)

Measuring the quality of goal-setting and reflection in socially shared regulated learning (SSRL) (Single Paper)

Hillie Aaldering (Presenting Author); Noortje Janssen (Co-Author)

Higher Education Students' Development of Self-Regulated Learning through Reflective Portfolio Use (Single Paper)

Sina Gottschlich (Presenting Author); Judith Sieben (Co-Author); Hillie Aaldering (Co-Author); Anique de Bruin (Co-Author)

Longitudinal Changes in Self-Regulated Learning and Challenges with Using Self-Report Data (Single Paper)

Samantha Vos (Presenting Author); Lisette Wijnia (Co-Author); rob martens (Co-Author); Renate de Groot (Co-Author)

Session F 26 12:15–13:45 Location: HS 11.03

# Examining the variation in higher education teachers' approaches to teaching using multiple methods

Chair

Liisa Postareff

Discussant

Lennia Matos

Organiser

Anna Parpala; Petri Nokelainen

Academics' approaches to teaching: A systematic review and preliminary insights for a meta-analysis (Single Paper)

Marian Ilie (Presenting Author); Liisa Postareff (Co-Author); Anna Parpala (Co-Author); Laurentiu Maricutoiu (Co-Author); Velibor Mladenovici (Co-Author); IOANA GABRIELA DOMILESCU (Co-Author)

Examining the variation in higher education teachers' approaches to teaching using multiple methods (Symposium)

Deepening the understanding of learning-focused approach to teaching using physiological measures  $({\rm Single~Paper})$ 

Anna Parpala (Presenting Author); Petri Nokelainen (Co-Author); Laura Pylväs (Co-Author); Liisa Postareff (Co-Author)

A cross-cultural study of university teachers' approaches to teaching in Italy and the UK  $(\mathrm{Single\ Paper})$ 

Anna Serbati (Presenting Author); Uwe Richter (Co-Author); Daniele Agostini (Co-Author); Elena Benini (Co-Author); Simon Pratt-Adams (Co-Author); Mark Warnes (Co-Author)

Item understanding of HEAT inventory in Colombia and Germany (Single Paper) Miriam Hansen (Presenting Author); Julia Mendzheritskaya (Co-Author); Irene Corvacho del Toro (Co-Author)

# Session G 01 14:00–15:30 Location: HS 03.01

# Leveraging Technology for Instructional Design and Assessing Learning Processes

Chair

Sanne van der Ven

Students Playing Narrative Full ADHD Game: Identification with the game character (Single Paper)

Kristian Kiili (Presenting Author); Helka Hirvonen (Co-Author); Carita Kiili (Co-Author)

Yarbus Revisited: Can Webcam-Based Eye Tracking Reveal Differences in Task Demands? (Single Paper)

Leen Catrysse (Presenting Author); Marijn Gijsen (Co-Author); Margot van Wermeskerken (Co-Author); Halszka Maria Jarodzka (Co-Author)

Seeing Students' Gaze: The Impact on Teachers' Instructional Adaptability and Student Learning (Single Paper)

Robert-Jan Korteland (Presenting Author); Ellen Kok (Co-Author); Casper Hulshof (Co-Author); Tamara Van Gog (Co-Author)

What are Teacher Roles within Immersive Virtual Learning Environments in Education? (Single Paper)

Esti Schwartz (Presenting Author); Ina Blau (Co-Author)

Session G 02 14:00–15:30 Location: HS 05.12

### Assessment and Evaluation Across Educational Contexts

Chair

Ning REN

Impact of Low-Intensity Parenting Seminars: Findings from Australian Schools (Single Paper)

Christopher Boyle (Presenting Author); Matthew R. Sanders (Co-Author); Tianyi Ma (Co-Author); Julie Hodges (Co-Author)

Evaluation of an Evidence-based Science Communication Training for Graduate Students (Single Paper)

Julian Fick (Presenting Author); Friederike Hendriks (Co-Author); Barbara Thies (Co-Author)

Authenticity in student self-assessment: an integrative review (Single Paper) Juuso Henrik Nieminen (Presenting Author); David Boud (Co-Author)

**Does Gender Influence Peer Assessment? A Systematic Review** (Single Paper) Jose Carlos Ocampo (Presenting Author); David Zamorano (Co-Author); Ernesto Panadero (Co-Author)

Session G 03 14:00–15:30 Location: HS 02.21

## Teaching and Learning in Changing Times

## Chair Siyu Zhu

Sustainability in Practice: Teacher Educators Engaging with Agenda 2030 and Transformative Education (Single Paper)

Maryam Rabbani Nia (Presenting Author); Ann-Kathrin Dittrich (Co-Author); Evi Agostini (Co-Author); Wietske Boon (Co-Author); Lucas Weinberg (Co-Author); Kgadi Mathabathe (Co-Author); Irma Eloff (Co-Author)

Variability of teaching quality between teacher- and student-centered sequences within a lesson (Single Paper)

Annelie Thom (Presenting Author); Anna-Katharina Praetorius (Co-Author); Thilo Kleickmann (Co-Author)

Patterns of teacher support to students as perceived self-regulated learners in the classroom (Single Paper)

Kateryna Horlenko (Presenting Author); Lina Kaminskienė (Co-Author); Anu Kajamies (Co-Author); Erno Lehtinen (Co-Author)

Teaching and learning conditions during COVID-19: A cross-national analysis with PISA data (Single Paper)

Giang Pham (Presenting Author); Franziska Locher (Presenting Author); Dimitra Kolovou (Co-Author); Eliane Arnold (Co-Author)

Session G 04 14:00–15:30 Location: Festsaal

#### Towards Fair and Effective Assessment Practices

#### Speaker

Helen Thouless

Modeling and measuring economic competence – a comparison of competence models and tests (Single Paper)

Steffen Spitzner (Presenting Author); Thomas Retzmann (Co-Author); Maximilian Zieser (Co-Author); Theresa Lorenz (Co-Author)

The effect of schools' average competence level on students' mathematics grades (Single Paper)

Mari-Pauliina Vainikainen (Presenting Author); Heidi Luhtajärvi (Co-Author); Maria Betanzos (Co-Author)

Developing a Socially Just Writing Assessment through Genre and Topic Knowledge Activation (Single Paper)

Natalia Avila Reyes (Presenting Author)

Reducing Cognitive Disengagement through Nudges During Mathematics Assessment (Single Paper)

Burcu Arslan (Presenting Author); Bridgid Finn (Co-Author)

Session G 05 14:00-15:30 Location: HS 05.12

## Challenges in Teacher Education

#### Chair

Mayra Mascareño Lara

Perspectives on the Future through Teacher Education Students' Visions (Single Paper)

Claudia Schreiner (Presenting Author); Christian Kraler (Co-Author); Sabrina Bacher (Co-Author)

Teacher-based discrimination against minoritized students in Germany: A meta-analytic review (Single Paper)

Kristin Schotte (Presenting Author); Christian Hunkler (Co-Author); Aileen Edele (Co-Author); Georg Lorenz (Co-Author); Sarah Gentrup (Institut zur Qualitätsentwicklung im Bildungswesen)

How to promote teacher-student relationships of pre-service teachers? An interview study  $(Single\ Paper)$ 

Nicole Bosse (Presenting Author); Alexander Groeschner (Friedrich Schiller University Jena)

Supervision of master's theses - Norwegian subject teacher educators' views and experiences (Single Paper)

Gunilla Eklund (Presenting Author); Anne Løvland (Co-Author)

Session G 06 14:00–15:30 Location: HS 15.05

# Bridging Innovation, Support and Student Succes

#### Chair

Dietsje Jolles

The joint relation of digital literacy, academic performances, and digital time use. (Single Paper)

Goan Booij (Presenting Author); Bieke Schreurs (Co-Author); Brenda Jansen (Co-Author); Minh Hao Nguyen (Co-Author); Andries van der Ark (Co-Author)

Examining relationships between educator-child interactions and children's developmental outcomes (Single Paper)

Yasmin Fong (Presenting Author); Kerry Lee (Co-Author); Alfredo Bautista (Co-Author); Jin Sun (Co-Author)

Homework Frequency, Time, and Help and Children's Academic Performance (Single Paper)

Gintas Silinskas (Presenting Author); Saule Raiziene (Co-Author)

Implementing innovations through facilitators: Cascade model works, yet school contexts matter (Single Paper)

Rebekka Stahnke (Presenting Author); Dilan Şahin-Gür (Co-Author); Corinna HankeIn (Co-Author); Susanne Prediger (Co-Author)

#### Session G 07 14:00–15:30 Location: SR 03.K1

# Inclusion, Equity and Special Educational Needs

#### Chair

Claudia Neuendorf

Beyond ability: Family affluence and ability grouping in Irish primary schools (Single Paper)

Olga Ioannidou (Presenting Author); Seaneen Sloan (Co-Author); Melissa Bohnert (Co-Author); Gabriela Martinez Sainz (Co-Author); Jennifer Symonds (Co-Author); Dympna Devine (Co-Author)

The role of knowledge-rich curricula in reducing achievement gaps in compulsory education (Single Paper)

Claudio Vanhees (Presenting Author); Jasper Nijlunsing (Co-Author); Michiel Wils (Co-Author); Tim Surma (Co-Author); Paul Kirschner (Co-Author)

Supporting struggling readers through an assessment-based reading intervention of student-teachers (Single Paper)

Sarah Bez (Presenting Author); Madalina Paizan (Co-Author); Karina Karst (Co-Author); Samuel Merk (Co-Author)

Session G 08 14:00–15:30 Location: HS 11.03

Shaping the future education: Technology, teacher development and systemic influences

Estimating school effects: the impact of SES indicators (Single Paper)

Koen Aesaert (Presenting Author); Zongliang Zheng (Co-Author)

From Books to Bots: The Utilisation of ChatGPT on Student Learning and Critical Thinking (Single Paper)

Gursaiv Kaur (Presenting Author); Marjahan Begum (Co-Author)

What drives the future teaching professional? (Single Paper)

Esther Canrinus (Presenting Author); Camilla Herlofsen (Co-Author); Anne Karin Vikstøl Olsen (Co-Author); Inger Marie Dalehefte (Co-Author)

Conditions for implementing educational technology: Views of trainee and inservice teachers  $({\rm Single~Paper})$ 

Sophia Gentner (Presenting Author); Juergen Seifried (Co-Author)

Session G 09 14:00–15:30 Location: HS 25.11

#### Learning in Social Interaction

#### Chair

Sierra Outerbridge

Friendship and Sense of Belonging in STEM Cohorts: A Special Focus on Underrepresented Gender Group (Single Paper)

Siyu Jiang (Presenting Author); Christoph Stadtfeld (Co-Author)

Hybrid epistemic practices in students' encounters with school content on platforms and apps (Single Paper)

Marie Nilsberth (Presenting Author); Fritjof Sahlström (Presenting Author); Fredrik Rusk (Co-Author)

Adaptive social robots and their role in cognitive, emotional, and self-regulated learning (Single Paper)

Helene Ackermann (Presenting Author); Anna L. Lange (Co-Author); Verena V. Hafner (Co-Author); Rebecca Lazarides (Co-Author)

Who are you? Classifying Knowledge Brokers and their Impact on Online Social Networks (Single Paper)

Martin Rehm (Presenting Author); Anita Caduff (Co-Author); Marie Lockton (Co-Author); Alan Daly (Co-Author)

Session G 10 14:00–15:30 Location: HS 46.01

## Relevance of School Leader and Teacher Professional Development

#### Chair

Sarah Forster-Heinzer

Supporting the Development of Inclusive Teacher Identities through Epistemic Games (Single Paper)

Nur Akkus Cakir (Presenting Author); Neslihan GÖK AYYILDIZ (Co-Author); Hurriyet Saridemir (Co-Author); Diler Oner (Co-Author); Aroutis Foster (Co-Author); Merve Zayim Kurtay (Co-Author)

Towards a theoretically founded and practically useful TPP Self-Scan for mentor teachers (Single Paper)

Esther Stronkhorst (Presenting Author); Iris Pauw (Co-Author); Hanna Westbroek (Co-Author)

Effects of student teachers' early entry into teaching and teaching out-of-field on professionalism (Single Paper)

Roman Zviagintsev (Presenting Author); Nele Kampa (Co-Author)

School Leaders' Self-Efficacy: Professional Development and Learning Networks Make a Difference (Single Paper)

Sebastian Röhl (Presenting Author); Ida Malini Syvertsen (Co-Author); Marcus Pietsch (Co-Author); Colin Cramer (Co-Author)

Session G 11 14:00–15:30 Location: HS 15.14

Teacher education, supporting teaching and learning communities

Chair

Trinidad Garcia

Collaborative leadership, shared values and flourishing learning communities (Single Paper)

Maria Zenios (Presenting Author)

Exploring peer-support in co-creation in higher education (Single Paper)

Maren Omland (Presenting Author)

Need-Supportive and Need-Thwarting Teaching Trough Different Eyes (Single Pa-

per)

Femke Borst (Presenting Author); Barbara Flunger (Co-Author); Jonne Bloem (Co-Author);

Lisette Hornstra (Co-Author)

Modelling Demands-Resources Fit in Teacher Education Using Open-Ended Data

(Single Paper)

Samuel Falcon (Presenting Author); Fernando NUNEZ-REGUEIRO (Co-Author); Pascal Bres-

soux (Co-Author)

Session G 12 14:00–15:30 Location: HS 02.11

Students with Special Educational Needs and Educational Contexts

Chair

Katrien De Cocker

Cognitive skills related to reading fluency and spelling development from Grade1 to Grade 7 (Single Paper)

Ann-Katrine Risberg (Presenting Author); Minna Torppa (Co-Author); Ulrika Wolff (Co-Author); Paula Salmi (Co-Author); Anna Widlund (Åbo Akademi University)

Through Their Eyes: SEN Children's Perceptions of prosocial behaviours and interactions in schools (Single Paper)

Aneeza Pervez (Presenting Author)

Understanding Biliteracy in Down Syndrome: Insights from a Maltese-English Bilingual Context (Single Paper)

Loredana Muscat (Presenting Author)

The role of teacher behaviour in students' attitudes and support towards peers with disabilities (Single Paper)

Marwin Felix Loeper (Presenting Author); Frank Hellmich (Co-Author)

Session G 13 14:00–15:30 Location: HS 15.02

## Dealing with stress and mental health in parents, teachers and children

#### Chair Ruth Wouters

Development and validation of an inventory on stress and coping in early primary school children (Single Paper)

Juliane Schlesier (Presenting Author); Diana Raufelder (Co-Author); Heike Eschenbeck (Co-Author); Carl-Walter Kohlmann (Co-Author); Arnold Lohaus (Co-Author)

Technology-mediated Mental Health Interventions for Teachers: A Systematic Review and Meta-analysis (Single Paper)

Patricia Simon (Presenting Author); Dan Paolo Rillorta Yema (Co-Author); Ma. Jenina N. Nalipay (Co-Author); Shuxin Liu (Co-Author); Ronnel Bornasal King (Co-Author)

Longitudinal Associations between Child Behavior and Parental Depressive Symptoms: A RI-CLPM (Single Paper)

Zhiyang Feng (Presenting Author); Asko Tolvanen (Co-Author); Minna Torppa (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author); Kenneth Eklund (Co-Author); Eija Pakarinen (Co-Author)

Session G 14 14:00–15:30 Location: HS 15.11

#### Cognitive skills and domain performance

#### Chair

Antonella Ferrara

Supporting leaders in higher education to become Research Ethics and Integrity Leaders (Single Paper)

Anu Tammeleht (Presenting Author); Erika Löfström (Co-Author)

Task Complexity as a Determinant of Mental Rotation: Gender Differences in Primary School Students (Single Paper)

Frank Reinhold (Presenting Author); Dinah Reuter (Co-Author)

From Replication to Extension: Unveiling Student Profiles in Fraction Comparison Tasks (Single Paper)

Flore Maricau (Presenting Author); Frank Reinhold (Co-Author); Timo Leuders (Co-Author); Katharina Loibl (Co-Author); Sameh Said-Metwalyt (Co-Author); Bert Reynvoet (Co-Author); Fien Depaepe (Co-Author); Wim Van Dooren (KU Leuven)

The effect of a COVID-19 infection on cognitive abilities in primary school students (Single Paper)

Wolfram Rollett (Presenting Author); Leitgeb Thomas (Presenting Author); Katja Scharenberg (Co-Author)

## Session G 15 14:00–15:30 Location: HS 01.22

#### Optimizing Instructional Design for Learning

#### Chair

Sharon Calor

The influences of pedagogical agents on students' situational interest and learning outcome (Single Paper)

Nadine Scheller (Presenting Author); Kaja Bergmann (Co-Author); Tanja Habermeyer (Co-Author); Sascha Schneider (Co-Author)

Stronger together: When is the personalization effect even more beneficial? (Single Paper)

Diana Pak (Presenting Author); Tanja Habermeyer (Co-Author); Sascha Schneider (University of Zurich)

Better together? Testing the collaborative working memory effect in an online learning environment (Single Paper)

Marloes Nederhand (Co-Author); Isa Noordover (Co-Author); Meng Lin (Co-Author); Bjorn de Koning (Erasmus University Rotterdam)

Haven't I heard that before? – Influence of auditory retrieval cues on learning and testing (Single Paper)

Sascha Schneider (Presenting Author); Nadine Scheller (Co-Author)

The Influence of Situational Interest on the Relationship between Choice and Learning Success (Single Paper)

Kaja Bergmann (Presenting Author); Cristina Tulea (Presenting Author); Tanja Habermeyer (Co-Author); Sascha Schneider (Co-Author)

Session G 16 14:00–15:30 Location: HS 02.23

#### Student Diversity and Inclusive Education

#### Chair

Giuseppe De Luca

Wellbeing in selective and general classes: a quasi-experimental study of the effects of grouping (Single Paper)

Satu Koivuhovi (Presenting Author); Mari Siipola (Co-Author); Terhi Pasu (Co-Author); Heidi Kesanto-Jokipolvi (Co-Author); Arja Rimpelä (Co-Author); Piia Seppänen (Co-Author); Mari-Pauliina Vainikainen (Co-Author)

Teaching Working Conditions for Curriculum Integration for Struggling Students in Middle School (Single Paper)

Charlotte Arnou (Presenting Author); Ingeborg Placklé (Co-Author); Machteld Vandecandelaere (Co-Author)

Educational neighborhoods in Vienna – A promising way to promote inclusive education? (Single Paper)

Nazime Öztürk (Presenting Author)

Effects of a Digital Migration Simulation on Understanding Immigration: A Quasi-Experimental Study (Single Paper)

Markus Al-Afifi (Presenting Author)

## Session G 17 14:00-15:30 Location: HS 02.01

#### Factors influencing student participation and performance

#### Chair

Samantha Vos

Supporting Collaborative Learning Across Different Domains and Tasks: A Meta-Analysis (Single Paper)

Lixiang Gao (Presenting Author); Frank Fischer (Co-Author); Olga Chernikova (Co-Author)

Validation of home environment for critical reading questionnaire (Single Paper) Jenni Ruotsalainen (Presenting Author); Leena Paakkari (Co-Author); Mari Manu (Co-Author); Jenni Salminen (Co-Author); Minna Torppa (Co-Author)

Who takes the floor in class? Exploring students' oral participation in Czech and German classrooms (Single Paper)

Lukas Mundelsee (Presenting Author); Tomáš Lintner (Presenting Author); Klára Šeďová (Co-Author)

Creative thinking in PISA 22 – Explaining the performance differences in Northern European countries (Single Paper)

Ninja Hienonen (Presenting Author); Nestori Kilpi (Presenting Author); Paivi Nilivaara (Co-Author); Mari-Pauliina Vainikainen (Co-Author)

Session G 18 14:00–15:30 Location: HS 11.01

#### Examining Teachers, Students and Learning Communities

#### Chair

Judit Martínez Moreno

The impact of Covid-19 on Early Learning and Evidence of Recovery in Brazil (Single Paper)

Mariane Campelo Koslinski (Presenting Author); Tiago Bartholo (Co-Author); Karina Santos (Co-Author); Daniel Lopes de Castro (Co-Author)

Future proofing teachers: What are the trends for the future of education? (Single Paper)

Chandan Dasgupta (Presenting Author); Natasha Dmoshinskaia (Co-Author); Marie Xhauflair (Co-Author); Sara van der Linden (Co-Author)

Education out there. A literature review of theoretical approaches to learning communities. (Single Paper)

Sibilla Montanari (Presenting Author); Nazime Öztürk (Co-Author); Evi Agostini (Co-Author); Denis Francesconi (Co-Author)

Trends in teachers' continuing professional learning needs in secondary schools (Single Paper)

Rikkert van der Lans (Presenting Author); Remmert Daas (Co-Author); Joost Jansen in de Wal (Co-Author); Elaine Wilson (Co-Author); Noriyuki Inoue (Co-Author); Tracy Durksen (Co-Author); Frank Cornelissen (Co-Author)

#### Session G 19 14:00–15:30 Location: SZ 15.21

#### Motivation and Mmotion in the Classroom

Chair Ian Thacker Motivation and Emotions in Math Class: The Role of Implicit Theories and Perceived Teacher's Support (Single Paper)

Dimitrios Moustakas (Presenting Author); Eleftheria Gonida (Co-Author)

Causal attributions and engagement in class: A daily diary study of success and failure experiences (Single Paper)

Astrid Poorthuis (Presenting Author); Ann-Kathrin Krause (Co-Author); Lisette Hornstra (Co-Author)

Expectations vs. Reality: Motivational Outcomes of Unmet Course-specific Expectations (Single Paper)

Zoë Maj Sander (Presenting Author); Vivien Rieder (Co-Author); Birgit Spinath (Co-Author)

Control and Value Appraisals in Achievement Situations: Links with Psychophysiological Responses (Single Paper)

Miriam Wünsch (Presenting Author); Lars-Erik Malmberg (Co-Author); Anne Christiane Frenzel (Co-Author); Franziska Eckerskorn (Co-Author)

Session G 20 14:00–15:30 Location: HS 15.13

#### Mindsets, Motivation and Self-Regulation

Chair Ethan Rubin The Impact of a scarcity mindset on students' sense of agency and attitudes toward basic income. (Single Paper)

Jessica Schulz (Presenting Author); Ai Miyamoto (Co-Author); Matthias Nückles (Co-Author)

Teachers Support for Adolescent Students Growth Mindset: A Random Intercept Cross-Lagged Panel Model (Single Paper)

Lene Vestad (Presenting Author); Edvin Bru (Co-Author)

A multi-perspective view on promoting self-regulated learning in language and science classes (Single Paper)

Amina Rosenthal (Presenting Author); Carmen Nadja Hirt (Co-Author); Tabea Daria Eberli (Co-Author); Johannes Jud (Co-Author); Yves Karlen (Co-Author)

An Integrated Theory of Academic Help Seeking (Single Paper) Kara Makara (Presenting Author); Teomara Rutherford (Co-Author) Session G 21 14:00–15:30 Location: HS 01.14

## Teacher and student self-regulation in learning processes

Chair

Armin Weinberger

Teachers' Awareness of Self-Regulated Learning and its Impact on Promoting Self-Regulated Learning (Single Paper)

Tabea Daria Eberli (Presenting Author); Yves Karlen (Co-Author)

Teachers' expectancy-value-cost profiles in professional development for supporting SRL (Single Paper)

Joosep Norma (Presenting Author)

Virtual Reality (VR) Simulations for Developing Preservice Teachers' Self-Regulated Teaching Skills (Single Paper)

Tova Michalsky (Presenting Author)

How Feedback and Coaching Influence Students' Self-regulated Learning in Programmatic Assessment (Single Paper)

Xian Liu (Presenting Author); Diana Dolmans (Co-Author); Maryam Asoodar (Co-Author); Zhien Li (Co-Author); Daniëlle Verstegen (Co-Author)

Session G 22 14:00–15:30 Location: HS 05.01 Experimentierhörsaal

#### Emotions and Motivation in Teaching and Learning

Chair

Myrthe Lubbers

Epistemic Network Analysis to Examine How Appraisals Connect to Regulation in Collaboration (Single Paper)

Shasha Li (Presenting Author); Junzhu Su (Co-Author); Meiting Chen (Co-Author); Clara F Peng (Co-Author); Luyao Xu (Co-Author); Nikki Lobczowski (Co-Author)

Individual Differences in Flow Experience Across Hybrid Learning Modalities (Single Paper)

Siem Buseyne (Presenting Author); Annelies Raes (Presenting Author); Celine Vens (Co-Author); Fien Depage (Co-Author); Jean Heutte (Co-Author)

Dynamics of Test Anxiety Over the Course of One Semester Advancing an Examination (Single Paper)

Jörn Sparfeldt (Presenting Author); Lea C. Schwindt (Co-Author); Rebecca Schneider (Co-Author)

Teachers' emotions in relation to differentiating homework (Single Paper) Christine Feiss (Presenting Author); Gerda Hagenauer (Co-Author)

Session G 23 14:00–15:30 Location: HS 15.06

## Reading, listeninig and writing: Cognitive processes and tools for effective learning

Chair

Yousef Alardhi

Listen very carefully! Tracking of auditory attention via EEG in individuals (Single Paper)

Davina Van den Broek (Presenting Author); Tianyi Li (Co-Author); Simon Geirnaert (Co-Author); Elien Bellon (Co-Author); Alexander Bertrand (Co-Author); Bert De Smedt (Co-Author)

Effects of a digital training intervention on how to address misconceptions in philosophy classes (Single Paper)

Markus H. Hefter (Presenting Author); Markus Bohlmann (Co-Author)

Relationships between Executive Functions, Text Quality and Textual Aspects in Skilled Writers (Single Paper)

Julie Philippek (Presenting Author); Rebecca Maria Kreutz (Co-Author); Ann-Kathrin Hennes (Co-Author); Barbara Schmidt (Co-Author); Alfred Schabmann (Co-Author)

Taking notes with pen or laptop: Effects of medium and test preparation on learning (Single Paper)

Marije van Amelsvoort (Presenting Author); Jan Engelen (Co-Author); Carel van Wijk (Co-Author)

Session G 24 14:00–15:30 Location: HS 12.01

## Self-Regulated Learning in Higher Education

Chair

Anne Suryani

Desirably Difficult? Low Support for Goal Setting Fosters Goal Recall but not Goal Quality (Single Paper)

Alexander Eitel (Presenting Author); Anna Kienitz (Co-Author); Andreas Vorholzer (Co-Author); Julius Weckler (Co-Author); Claudia von Aufschnaiter (Co-Author)

Boost your Motivation: An Online Intervention to Boost Autonomous Self-Motivational Strategies. (Single Paper)

Elke Pinoy (Presenting Author)

Use of student-facing learning analytics for self-regulated learning: a systematic review. (Single Paper)

Theo Nelissen (Presenting Author); Milou van Harsel (Co-Author); Esther van der Stappen (Co-Author); Anique de Bruin (Co-Author)

Predicting exam performance using practice data: A cross-curricular comparison (Single Paper)

Jakob Schwerter (Presenting Author); Judith Bose (Co-Author); Philipp Doebler (Co-Author); Marko Schmellenkamp (Co-Author); Thomas Zeume (Co-Author)

Session G 25 14:00–15:30 Location: HS 11.02

## **Examining Inclusive Education and Special Educational Needs**

Chair

Anna Matejko

Predicting peer acceptance of students with and without special educational needs (Single Paper)

Ivonne Douma (Presenting Author)

Outcomes of a Mentor Training Program for Parents of Children with Neurodevelopmental Disabilities (Single Paper)

Ana Guimarães (Presenting Author); Armanda Pereira (Co-Author); André Oliveira (Co-Author); Sandra Mesquita (Co-Author); Pedro Rosário (Co-Author); Tânia Moreira (Centro de Investigação em Psicologia)

Joined forces for inclusive education: Quality partnerships between mainstream and special education (Single Paper)

Liesbet Claeys (Presenting Author); Elke Struyf (Co-Author); Sara Nijs (Co-Author)

Development of students' subjective well-being in inclusive classrooms during secondary education (Single Paper)

Lena Nusser (Presenting Author); Carmen Zurbriggen (Co-Author)

Session G 26 14:00–15:30 Location: HS 01.15

## Shaping learners: The influence of people, policy and technology

Chair

Iro Xenidou-Dervou

Child engagement during interaction with digital and robotic activities: a systematic review (Single Paper)

Chiara Pecini (Presenting Author); Viola Margheri (Co-Author); Stefano Scatigna (Co-Author); Andrea Guazzini (Co-Author); Daniela Graziani (Co-Author); Eva Bei (Co-Author)

Parental Involvement, Math Motivation and Achievement in Native and Non-Native Students (Single Paper)

Mafalda Campos (Presenting Author); Jelena Radišić (Co-Author); Francisco Peixoto (Co-Author)

The importance of influencers for values education in emerging adulthood (Single Paper)

Birgitta Kopp (Presenting Author); Christine Dinkel (Co-Author)

Literacy Curriculum Reform and Teacher Professionalism: Insights from Australia and New Zealand. (Single Paper)

Emma Cunningham (Presenting Author); Leanne Fray (Presenting Author)

Session G 27	14:00-15:30	Location: HS 15.12
Early childhood education:	The role of family, teacher-child interactions and digital	al interventions
Chair Shien Chue	Empowering Hard-of-Hearing Preschoolers: Enhancing Language and Math Skills with Digital Books (Single Paper) Sigal Eden (Presenting Author); Ruti Neeman (Co-Author)	
RCT of a Digital Vocabulary Intervention for L2 I Kari-Anne Bottegård Næss (Presenting Author); Frida Jo Thormod Idsoe (Co-Author)		` /
	Unlocking Everyday Learning: EC Teacher-Child Interaction Science Education (Single Paper) Simone Dunekacke (Presenting Author); Elisa Oppermann (Co-Author)	v
	Intergenerational Links: The Impact of Parental Math Anxi Achievement (Single Paper) Wenke Möhring (Presenting Author)	iety on Children's Math

Session G 28	14:00-15:30	Location: HS 15.04
Teachers, Technology and	Learning Environments	
Chair Stoo Sepp	Enhancing Teacher Wellbeing and Student Belonging throutoring Approach (Single Paper) Christi Bergin (Presenting Author); Jessica Kilday (Co-Author); Chad Rose (Co-Author); Aaron Campbell (Co-Author); Jessica Prewett (Co-Author)	Nicole Brass (Co-Author);
	A Meta-Analysis of Learning and Motivation in Synchrono Asynchronous Education (Single Paper) Andreas Gegenfurtner (Presenting Author); Alijagic Aldin (Co-Author); Özün Keskin (Co-Author)	, ,

quality (Single Paper)

Martin Stigmar (Presenting Author); Adrian Lundberg (Malmö University)

Teachers' knowledge appropriation during training predicts intentions to integrate

Bringing together university educators' and students' perspectives on teaching

technology (Single Paper)

Tobias Ley (Presenting Author); Kairit Tammets (Co-Author); Milena Sarmiento-Márquez (Co-Author)

#### Session G 29 14:00–15:30 Location: HS 44.11

## Academic and learning challenges

#### Chair

Ina Alexandra Machura

The influence of parametrised tasks on students' accuracy of JOLs - A secondary analysis (Single Paper)

Theresa Walesch (Presenting Author); Carolin Baumann (Co-Author); Samuel Merk (Co-Author); Anja Prinz-Weiß (Co-Author)

Exploring the Existence of the Interest-Overconfidence Effect in Primary and Secondary Education (Single Paper)

Lisette Wijnia (Presenting Author); Corine Van Driel (Co-Author); Corine Hijmissen-Wisselink (Co-Author); Jacqueline van der Stoop (Co-Author); Leen Catrysse (Co-Author)

Mapping the Structure of Academic Challenges to Realize Student Potential: A Bifactor ESEM Approach (Single Paper)

Ramin Rostampour (Presenting Author); Philip Winne (Co-Author); Allyson Hadwin (University of Victoria)

Examining Word Networks in Group Planning to Determine Teamwork Standards (Single Paper)

Jun Oshima (Co-Author); Mariel Miller (Co-Author); Aishah Bakhtiar (Shizuoka University; University of Tasmania); Allyson Hadwin (University of Victoria)

Coffee Break 15:30–16:00

Coffee Break

Session H 01 16:00–17:30 Location: HS 01.14

# Designing effective learning experiences

#### Chair

Minna Hannula-Sormunen

Creating educational videos with secondary school students – methods and tools for the classroom (Demo Session)

Theresa Hermann (Presenting Author); Malte Ring (Co-Author)

Genre-based approaches for the development of academic writing competence (Demo Session)

Antonia Goesweiner (Presenting Author); Ida Victoria Menditti (Co-Author)

Citizen Science through Game-based learning: A Co-designed Biology card game with Mosquito Experts (Demo Session)

Deborah Devis (Presenting Author)

# Session H 02 16:00–17:30 Location: SR 15.43

#### Performance in STEM, Language and Writing

#### Speaker

Judit Martínez Moreno

Self-Regulated Learning in the Community College Language Classroom: A PLS-SEM Approach (Poster Presentation)

Christopher Hromalik (Presenting Author); Tiffany A. Koszalka (Co-Author)

Predicting Dropout Risk in Online Mentoring for Girls in STEM: Analyzing Emotions in Text Using NLP (Poster Presentation)

Claudia Uebler (Presenting Author); Heidrun Stoeger (Co-Author); Albert Ziegler (University of Erlangen-Nuremberg)

Vocabulary and Narrative skills' role on Comprehension in Mono and Bilingual Primary school children (Poster Presentation)

GIULIA VETTORI (Co-Author); Lucia Bigozzi (Co-Author); Alice Mercugliano (University of Florence); Oriana Incognito (IUL University (Università Telematica degli Studi IUL))

Argumentative Writing in Inclusive Science Classes for Students with Learning Difficulties (Poster Presentation)

Joseph Boyle (Presenting Author)

Intersectional Disparities in STEM and the Role of Comparative Advantage in STEM (Poster Presentation)

Ian Thacker (Presenting Author); Han Bum Lee (Co-Author); Joseph Cimpian (Co-Author)

Chinese students' implicit beliefs about writing when writing in their native language (Poster Presentation)

Jiachen Hao (Presenting Author)

Session H 03 16:00–17:30 Location: SR 15.45

#### Reading skills and assessment in typical and atypical development

#### Chair

Evelien Aerts

Standardization and evaluation of phonological tasks for L1 and L2 Germanlearners in kindergarten (Poster Presentation)

Jasmin Gasser (Co-Author); Tugce Aras (Co-Author); Iliana Karipidis (Co-Author); Silvia Brem (Co-Author); Alexandra Schreiber (University of Zurich)

Enriching Reading Assessments with a Structured Annotation Framework (Poster Presentation)

Maja Stegenwallner-Schütz (Presenting Author); Jan Brasser (Co-Author); Cui Ding (Co-Author); Iza Skrjanec (Co-Author); Ramunė Kasperė (Co-Author); Lena Jäger (Co-Author); Yevgeni Berzak (Co-Author)

Hypertext navigation challenges for students with attentional deficit and students with autism (Poster Presentation)

Pablo Delgado (Presenting Author); Paula Barea-Arroyo (Co-Author); Gema Erena-Guardia (Co-Author); Vanessa Fernández-Torres (Co-Author); Joaquín Ibáñez-Alfonso (Co-Author); Martina Micai (Co-Author); F. Javier Moreno-Pérez (Co-Author); Isabel R. Rodríguez-Ortiz (Co-Author); Miriam Rivero-Contreras (Co-Author); Adrián Solís-Campos (Co-Author); David Saldaña (Co-Author)

Investigating Parental Language, Reading and Writing Skills of Adolescents with and without Dyslexia (Poster Presentation)

Christian Waldmann (Presenting Author); Camilla Nilvius (Presenting Author); Linda Sandström (Co-Author); Trude Nergård-Nilssen (Co-Author)

Reading skills of first-grade students in Estonia: A comparative cohort study with a 12-year gap (Poster Presentation)

Anna-Liisa Jõgi (Presenting Author); Piret Soodla (Co-Author)

#### Session H 04 16:00-17:30 Location: SR 15.42

#### **Pre-Service Teacher Education**

## ${\bf Chair}$

Jonne Bloem

Relevance of Multicultural Education Competence: Do Preservice Preschool Teachers Care? (Poster Presentation)

Georg Krammer (Presenting Author); Karmen Mlinar (Co-Author)

Development of a Test to Measure the Data Literacy of Pre-Service Teachers (Poster Presentation)

Dominik Endemann (Presenting Author); Holger Gärtner (Co-Author)

Diagnosing Basic School Algebraic Competencies in Teacher Education at the Onset of University (Poster Presentation)

Carolin Wosch (Presenting Author); Ricarda Holland (Co-Author); Jessica Hoth (Co-Author); Tobias Rolfes (Co-Author)

Navigating the First Two Years: A Longitudinal Study of Novice Teacher Competency Development (Poster Presentation)

Jakub Vlček (Presenting Author); Klára Šeďová (Co-Author)

Prior Knowledge Moderates the Effect of Prompts on Pre-Service Teachers' Professional Vision (Poster Presentation)

Franziska Tschönhens (Presenting Author); Tim Fütterer (Co-Author); Kathleen Stürmer (Co-Author); Andreas Lachner (Co-Author)

Attitudes, experiences and beliefs of pre-service teacher students about educational research (Poster Presentation)

Ines Deibl (Presenting Author); Stephanie Moser (Co-Author); Christoph Weber (Co-Author); David Kemethofer (Co-Author)

Session H 05 16:00–17:30 Location: HS 15.11

#### **Advanced Research Methods**

## Chair

Nathalie Bick

Residual Dynamic Structural Equation Model (RDSEM) for modelling small-n intraindividual data (Demo Session)

Lars-Erik Malmberg (Presenting Author); Henry Tsz Lo (Co-Author); Christina Heemskerk (Co-Author); Patrick Esser (Co-Author); Helen Dawes (Co-Author); Claudia Roebers (Co-Author)

Using Dynamic Structural Equation Modelling (DSEM) for multivariate multilevel data (Demo Session)

Jussi Järvinen (Presenting Author); Lars-Erik Malmberg (Co-Author)

ICC4IRR: A Shiny Application to Estimate Interrater Reliability from Incomplete Observation Data (Demo Session)

Debby ten Hove (Presenting Author); Letty Koopman (Co-Author)

#### Session H 06 16:00-17:30 Location: SR 15.44

#### Digital Technology and AI Literacy for Quality Instruction

#### Chair

Boris Eckstein

A Theoretical Approach and a Study Plan to Support Student Reflection with AI Agents (Poster Presentation)

Gerti Pishtari (Presenting Author); Marlene Wagner (Co-Author); Milena Sarmiento-Márquez (Co-Author); Tobias Ley (Co-Author)

Lay Integration of Conflicting Scientific Information that Challenges Methods and Interpretations (Poster Presentation)

Etsuji Yamaguchi (Co-Author); Hiroki Oura (Co-Author); Clark Chinn (Rutgers University); Toshio Mochizuki (Waseda University)

1st year higher education students' AI capabilities: Trust and social boundaries of AI interaction (Poster Presentation)

Anceli Kaveri (Presenting Author); Anni silvola (Co-Author); Joonas Merikko (Co-Author); Hanni Muukkonen (Co-Author)

Adaptive Learning & AI: Educational Quality Criteria guiding teachers & RAG Systems (Poster Presentation)

Verena Köstler (Presenting Author); Veronika Hackl (Co-Author); Patrick Urlbauer (Co-Author)

A Multinational Assessment of AI Literacy among University Students in Germany, the UK, and the US (Poster Presentation)

Marie Hornberger (Presenting Author); Arne Bewersdorff (Co-Author); Daniel Schiff (Co-Author); Claudia Nerdel (Co-Author)

What is digital agency? Conceptualizing digital agency at workplace (Poster Presentation)

Pauliina Rikala (Presenting Author); Minna Ylönen (Co-Author); Ville Heilala (Co-Author); Panu Forsman (Co-Author); Raija Hämäläinen (Co-Author)

Session H 07 16:00–17:30 Location: HS 15.11

#### Methods for Knowing and Supporting Social Dynamics and Collaborative Learning

#### Chair

Daniel Muijs

LudiCo: A serious game to support trust and grounding in collaborative learning in higher education (Demo Session)

Mayra Mascareño Lara (Presenting Author); Nienke Renting (Co-Author); Marij Veldman (Co-Author); Lucie Ostendorf (Co-Author); Steven de Rooij (Co-Author)

Exploring Classroom Social Dynamics: A Demonstration of the SMETRY Method (Demo Session)

Ágota Szekeres (Presenting Author); Endre Horváth (Co-Author)

An introductory demonstration of the potential of social network analysis for educational research  $({\rm Demo~Session})$ 

Charlotte Baez (Presenting Author); Marco Galle (Presenting Author)

Session H 08	$16:00{-}17:30$	Location: HS 05.01 Experimentierhörsaal
Digital tools for Teachers		
Chair Fabien Bitu	eDoer: An AI-Driven Community-Based Platform for Fucation (Demo Session) Mohammadreza Molavi Hajiagha (Presenting Author); Gábor K madreza Tavakoli (Co-Author); Mohammad Moein (Co-Author) Information Centre for Science and Technology)	ismihók (Co-Author); Moham-
	Design and Development of a Co-instructional Designer Kristina Krushinskaia (Presenting Author); Jan Elen (Co-Author)	,

Session H 09	16:00-17:30	Location: HS 05.12
New tools for reliability, m	nodeling and data complexity	
Chair Sabine Manzel	RelRep: Demonstrating a Shiny App For Reporting the Representativeness of Appha or Omega Reliability (Demo Session) Denis Dumas (Presenting Author); Daniel McNeish (Co-Author)	
	Using Card Games to Empower Educators in Designing sponsibility of Learning (Demo Session) Amira Elnouty (Presenting Author)	for Student Taking Re-
	A Multilevel Approach for Assessing and Modeling Teach Using Latent Variables (Demo Session) Julian F. Lohmann (Presenting Author); Nils Machts (Co-Author Steffen Zitzmann (Co-Author)	·

Session H 10 16:00–17:30 Location: SR 15.48

## VR and Learning Environments in Education

#### Chair

Florencia Gomez Zaccarelli

Does the instructor presence matter after all? (Poster Presentation)

Diana Pak (Presenting Author); Juliette Désiron (Co-Author); Sascha Schneider (University of Zurich)

Current Trends for Technology-enhanced Instructional Labs in STEM Education (Systematic Meta-Review) (Poster Presentation)

Salome Flegr (Presenting Author)

Presence in iVR Learning Environments – Essential for Learning, Difficult to Measure and Understand (Poster Presentation)

Felix Kapp (Presenting Author); Pia Spangenberger (Co-Author)

A Step in the Dark: Approaching NS-Propaganda pictures in dark VR-scenes fosters pictorial retention (Poster Presentation)

Birgit Brucker (Presenting Author); Martin Lachmair (Co-Author); Susana Ruiz Fernández (Co-Author); Peter Gerjets (Co-Author)

Gender Differences in Mental Rotation Ability Testing: Using VR to Eliminate Design Bias? (Poster Presentation)

Zoya Kozlova (Presenting Author); Raphael Cera (Co-Author); Christoph Hoyer (Co-Author); Sarah Hofer (Co-Author); Jochen Kuhn (University of Munich (LMU))

Umbrella Review: Evidence on the Effectiveness of Integrating Virtual Reality in Education (Poster Presentation)

Yuchun Zhong (Presenting Author); Alex Shum (Co-Author); Chunqi Li (The University of Hong Kong); Juming Jiang (Hong Kong Metropolitan University); Luke Fryer (The University of Hong Kong)

Session H 11 16:00–17:30 Location: HS 01.22

## AI agents and Innovative E-Learning Environments

#### Chair

Michael Himmelsbach

Fostering Pedagogical and Didactic Reasoning Skills through an Innovative E-Learning Environment (Demo Session)

Roland Ebert-Glang (Presenting Author); Matthias Nückles (Co-Author)

Multi-Agent Chatbot for Teacher Training Role-Play Based on Habermas's Communication Theory (Demo Session)

Edith Braun (Presenting Author); Erum Afzal (Presenting Author)

Reimagining dialogue facilitator training by incorporating theory-based GenAI agents (Demo Session)

Elad Yacobson (Co-Author); Christa Asterhan (Co-Author); Ayelet Baram-Tsabari (Co-Author); Avivit Arvatz (The Hebrew University of Jerusalem)

AI-Powered Pedagogical Conversational Agent for Social-Emotional Training in Early Education (Demo Session)

## Session H 12 16:00–17:30 Location: HS 15.06

## AI Applications for Learning, Professional Development and Research

#### **Speaker** Hai Min Dai

AI for Accelerated Systematic Literature Reviews in Educational Research (Demo Session)

Charlotte Arnou (Presenting Author); Rasmus Hvingelby (Co-Author); Ingeborg Placklé (Co-Author); Machteld Vandecandelaere (Co-Author); Tove Holm-Larsen (Co-Author)

An AI-Based System for Implementing Adaptive Professional Development Programs for Teachers (Demo Session)

Armin Fabian (Presenting Author); Nina Udvardi-Lakos (Co-Author); Tim Fütterer (Co-Author); Marei Beukman (Co-Author); Björn Rudzewitz (Co-Author); Xiaobin Chen (Co-Author)

Development of a Virtual Patient and AI-Enhanced Chat Platform to Foster Clinical Competence  $({\rm Demo~Session})$ 

Saroj Sharma (Presenting Author); Tarkan Üsküdar (Co-Author); Carolin Thiel (Co-Author); Daniela Yildiz (Co-Author); Armin Weinberger (Co-Author)

Session H 13 16:00–17:30 Location: HS 15.13

#### From Case to Scale: Advancing Literacy Research with Multiple Single-Case Designs

#### Chair

Rui Alexandre Alves

#### Discussant

Roel van Steensel

#### Organiser

Hilde Van Keer; Oddny Judith Solheim

Tracking Individual Progress: The Role of Multiple Single-Case Designs in Literacy Research (Single Paper)

Fien De Smedt (Presenting Author); Jean Schumaker (Co-Author)

From Case to Scale: Advancing Literacy Research with Multiple Single-Case Designs (Invited Symposium)

Multiple Single Case Studies as a Foundation for Educational Intervention Development (Single Paper)

Hilde Van Keer (Presenting Author); Fien De Smedt (Co-Author); Ana Camacho (Co-Author); Rui Alexandre Alves (Co-Author); Aline Alves-Wold (Co-Author); Vibeke Rønneberg (Co-Author); Erin McTigue (Co-Author); Oddny Judith Solheim (Co-Author)

Don't change the measure - Challenges to consider in single-case designs (Single Paper)

Vibeke Rønneberg (Presenting Author); Oddny Judith Solheim (Co-Author)

A meta-analysis of single-case design writing interventions from 2008 to 2024 (Single Paper)

Ana Camacho (Presenting Author); Aline Alves-Wold (Presenting Author); Erin McTigue (Co-Author); Mariola Moeyaert (Co-Author); Vibeke Rønneberg (Co-Author)

Session H 14 16:00-17:30 Location: HS 11.02

## Effective Teaching, Effective Teachers: Insights from a 5-Year International Research Collaboration

Chair

Lisa Bardach Organiser

Mareike Kunter; Robert Klassen

Effective Teaching, Effective Teachers: Insights from a 5-Year International Research Collaboration (Invited Symposium)

The Validity and Utility of Established and Emerging Measures of Teaching Quality: A Review (Single Paper)

Courtney Bell (Presenting Author); Mariana Castro (Co-Author); Verena Jörg (Co-Author); Rui Meng (Co-Author); Xin Xie (Co-Author); Mareike Kunter (Co-Author); Jenny Oloff (Co-Author)

Teachers Post-Pandemic Wellbeing: Have Teachers Recovered and Which Factors were Supportive? (Single Paper)

Meret Bunge (Presenting Author); Thamar Voss (Co-Author); Dirk Richter (Co-Author); Mareike Kunter (Co-Author); Uta Klusmann (Co-Author)

 $\begin{tabular}{ll} \textbf{Teacher Shortages Across Countries: Evidence from TALIS on Country and School Contributors (Single Paper)} \end{tabular}$ 

Robert Klassen (Presenting Author); Katherine Larned (Co-Author); Heather Hill (Co-Author); Helen Watt (Co-Author); Marjolein Zee (Co-Author)

In Search of the Good Teacher – An EARLI Centre for Excellence in Research  $2021\text{-}2025~(\mathrm{Single~Paper})$ 

Mareike Kunter (Presenting Author); Robert Klassen (Co-Author)

Session H 15 16:00–17:30 Location: HS 02.11

# Single-Case Graphs and Progress-Monitoring: Evidence-Based Decision-Making in Inclusive Education

#### Chair

Jannis Bosch; Jochanan Veerbeek; Mika Paananen

Discussant

Elmar Souvignier

Single-Case Graphs and Progress-Monitoring: Evidence-Based Decision-Making in Inclusive Education (Invited Symposium)

Enhancing Pre-Service Teachers' Visual Analysis Skills for Single-Case Experimental Designs (Single Paper)

Jannis Bosch (Presenting Author); Theresa Maria Steiner (Presenting Author); Timo Lüke (Co-Author); Jürgen Wilbert (Co-Author)

Mathematics Progress Monitoring in Middle School: Supporting Teachers with DBDM (Single Paper)

Sarah Powell (Presenting Author); Erica Lembke (Co-Author); Leanne Ketterlin-Geller (Co-Author)

Computerized CBM maze reading tasks: A wealth of data to monitor and inform instruction. (Single Paper)

Jochanan Veerbeek (Presenting Author); Christine Espin (Co-Author)

Single-case experimental study of behaviour intervention in Early Childhood Education and Care units (Single Paper)

Mika Paananen (Presenting Author); Meri Liimatainen (Co-Author); Henrik Husberg (Co-Author); Anne Karhu (Co-Author)

## Session H 16 16:00-17:30 Location: HS 11.03

## Early childhood mathematics education: teacher perspectives, opportunities and impact

Chair

Pernille Bødtker Sunde

Discussant

Hedwig Gasteiger

Organiser

Joke Torbeyns

Early childhood mathematics education: teacher perspectives, opportunities and impact (Invited Symposium)

Domain-general and domain-specific effects of kindergarten education on math achievement in school (Single Paper)

Paul Leseman (Presenting Author)

Initial math instruction and young children's perceptions and use of manipulatives in math tasks (Single Paper)

Megan Foulkes (Presenting Author); Francesco Sella (Co-Author); Camilla Gilmore (Co-Author)

Early childhood teachers' competence in mathematics education: From knowledge to action (Single Paper)

Lena Aumann (Presenting Author); Julia Bruns (Co-Author)

What constitutes mathematics in the early years? Preschool teachers' perspectives (Single Paper)

Pernille Bødtker Sunde (Presenting Author); Joke Torbeyns (Presenting Author); Nore Wijns (Co-Author); Mette Bjerre (Co-Author)

Session H 17 16:00–17:30 Location: SZ 15.21

## Reconsidering Conceptual Change: How the Past Shapes the Future

Chair

Anastasia/Natassa Kyriakopoulou; Jake McMullen Celebrating 30 years since the start of the EARLI SIG on Conceptual Change: What have we learned? (Single Paper)

Stella Vosniadou (Presenting Author)

Consolidating a Consensus View of Conceptual Change in Science Learning (Single Paper)

Tamer Amin (Presenting Author)

Conceptual change and teaching in the social sciences: findings and future directions (Single Paper)

Cecilia Lundholm (Presenting Author)

Reconsidering Conceptual Change: How the Past Shapes the Future (Invited Symposium)

Forty years research on conceptual change – major achievements and obstacles (Single Paper)

Erno Lehtinen (Presenting Author)

Session H 18	16:00-17:30	Location: HS 44.11
Transition Scenarios		
Chair ASTRID CAMILLA WIIG Discussant	Supporting transition through aesthetic experience: Narrative Program (Single Paper) Nathalie Muller Mirza (Presenting Author); Valérie Tartas (Presenting Author)	
Asa Makitalo	Transitions, Student Voices and Hope Pedagogies. A Paper) Alessio Surian (Università degli Studi di Padova)	Dialogical Approach (Single
	Students' Imaginaries of Futures: Diversity, Center-Per Paper) Maria Bäcke (Presenting Author)	ripheries, and Equity (Single
	Transition Scenarios (Invited Symposium)	
	Making transitions: Youth ideas of the future risk of society (Single Paper) ASTRID CAMILLA WIIG (Presenting Author); Willy Aagre (I	G
		Presenting Author)

Session H 19	16:00-17:30	Location: HS 15.04
Components of writing to	learn	
Chair Veerle Baaijen	Components of writing to learn (Invited Symposium)	
Discussant Gert Rijlaarsdam Organiser	Effects of removing visual feedback on writing to learn (Si David Galbraith (Presenting Author); Olivia Prentice (Co-Author)	
David Galbraith	ChatGPT as feedback tool for improving learners' strateg (Single Paper)	, c
	Laura Reichenbach (Presenting Author); Matthias Nückles (Co-Au	thor)
	Writing or speaking to learn with learning journals? Med medium effect (Single Paper) Matthias Nückles (Presenting Author); Florian Luft (Co-Author);	, ,
	Beliefs about writing to learn (Single Paper) Veerle Baaijen (Presenting Author); David Galbraith (Co-Author)	

Session H 20 16:00–17:30 Location: Festsaal

Symposium on What constitutes frontline research in learning and instruction

**Chair** Crina Damsa

Discussant Roger Saljo Organiser

Nina Bonderup Dohn

Symposium on What constitutes frontline research in learning and instruction (Invited Symposium)

Intelligence Augmentation for Artificial Intelligence: A Frontline issue for Educational Research (Single Paper)

Cindy Hmelo-Silver (Presenting Author); Sanna Järvelä (Co-Author); Sadhana Puntambekar (Co-Author); Nikol Rummel (Co-Author)

Advancing Learning and Instruction through Interdisciplinary Research (Single Paper)

Allison Littlejohn (Presenting Author)

The origins and evolution of learning: Cumulation of know-how and shaping of practices of knowing (Single Paper)

Roger Saljo (Presenting Author)

Frontline research in mathematics learning and instruction: a personal testimony and reflection (Single Paper)

Lieven Verschaffel (Presenting Author)

Session H 21 16:00–17:30 Location: HS 02.21

Evidence-informed Sustainability Education in Higher Education

Chair

Despoina Georgiou

Discussant

Bernadette Dilger

Organiser

Nina Bohm; Stefan T. Siegel;

Tim Stevens

 ${\bf Evidence\hbox{-}informed \ Sustainability \ Education \ in \ Higher \ Education \ (Invited \ Sympolical Symp$ 

sium)

From Climate Anxiety to Hope: a Critical Review of Sustainability Competency Frameworks (Single Paper)

Nina Bohm (Presenting Author); Tim Stevens (Co-Author); Karin Rebel (Co-Author)

System Thinking Among Students in Sustainability Programs: A Pilot-Study (Single Paper)

Robert Kordts (Presenting Author); Stefan T. Siegel (Presenting Author); Birgit Kopainiski (Co-Author)

Exploring Professional Self-Identity Development in Undergraduate Sustainability Science Students (Single Paper)

Margien Bootsma (Presenting Author); Nina Bohm (Co-Author)

Experts' Perspectives on Myths in and About Sustainability Education (Single Paper)

Stefan T. Siegel (Presenting Author)

## Session H 22 16:00-17:30 Location: HS 46.01

## Fostering researcher independence: what are development consequences in doctoral context?

Chair

Inge Van der weijden

Discussant

Søren Bengtsen

Staff perceptions of researcher independence in the pre-application stage of doctoral admissions (Single Paper)

Dangeni (Presenting Author); James Burford (Co-Author); Susan Deeb (Co-Author); Emily Henderson (Co-Author); Sophia Kier-Byfield (Co-Author); Ahmad Akkad (Co-Author)

A critical discussion of the terminology used in doctoral education (Single Paper) Dely Elliot (Presenting Author); Melina Aarnikoivu (Co-Author); El Crabtree (Co-Author); Matt Drury (Co-Author)

Doctoral writing as a promotor for researcher development and independence (Single Paper)

Montserrat Castelló (Presenting Author); Anna Sala Bubaré (Co-Author)

The implicit value of intellectual humility in scholarly advancement (Single Paper) Dely Elliot (Presenting Author); Ruth Albertyn (Co-Author); Yusuke Sakurai (Co-Author)

Fostering researcher independence: what are development consequences in doctoral context? (Invited Symposium)

Session H 23 16:00–17:30 Location: HS 15.05

#### Methodologies to Process the Online Measures of Learning Phenomena

Chair

Nora McIntyre; Tiina Törmänen

Discussant

Halszka Maria Jarodzka

The arousal of learning processes in Finnish vocabulary learning: An electrodermal activity approach (Single Paper)

Jobert Ngwenya (Presenting Author); Héctor J. Pijeira-Díaz (Co-Author); Anu Tourunen (Co-Author); Virpi-Liisa Kykyri (Co-Author)

Advancing hybrid intelligence through multimodal learning analytics of human-AI interactions (Single Paper)

Andy (Khanh Xuan) Nguyen (Presenting Author)

Exploring the relationship between physiological arousal, teacher enthusiasm and lesson enjoyment (Single Paper)

Muhterem Dindar (Presenting Author); Ismail Celik (Co-Author); Héctor J. Pijeira-Díaz (Co-Author); Signe Pirkko Siklander (Co-Author)

Using causality to explain the collaborative processes in pair programming (Single Paper)

Kshitij Sharma (Presenting Author)

Methodologies to Process the Online Measures of Learning Phenomena (Invited Symposium)

Session H 24 16:00–17:30 Location: LS 15.03

## **Advances in Teacher Training**

#### Chair

Johanna Schoenherr

The Implementation of Dialogic Teaching in Preservice Teachers' Education: A Comparative Study (Roundtable)

Evanna Ratner (Presenting Author); Benzi Slakmon (Co-Author); Merav Eyal (Co-Author); Dikla Brokman (Co-Author)

Exploring interventions focusing on university teachers' competences for student engagement (Roundtable)

Irene Douwes-van Ark (Presenting Author); Marjon Fokkens-Bruinsma (Co-Author); Jan Folkert Deinum (Co-Author); Hanke Korpershoek (Co-Author)

Facilitator-Actor Synergy: Unleashing Human Potential in Simulations for Future Educators (Roundtable)

Orna Levin (Presenting Author); Tali Hagshoury (Presenting Author); Libby Ophir (Co-Author); Sofi Shahwan- Dalal (Co-Author)

Session H 25 16:00–17:30 Location: HS 15.12

#### Grasping Informal and Transformative Learning Across Diverse Contexts

#### Chair

Eva Lindgren

Reconsidering 'radicalization': Intersectional and climate activists' learning across contexts (Single Paper)

Larike Bronkhorst (Presenting Author); Kaja Chmielewska (Co-Author); Eline Terpstra (Co-Author)

Exploring the Untapped Potential of Single-Case Experimental Research for Professional Development (Single Paper)

Katrien Cuyvers (Presenting Author); Regina Mulder (Presenting Author)

Transformative learning in higher education through inter- and transdisciplinarity (Single Paper)

Katharina Musil (Presenting Author); Sabine Freudhofmayer (Co-Author); Michaela Großschädl (Co-Author)

Categorizing Outcomes from Vocational Teachers' Informal Learning Using Experience Sampling (Single Paper)

Manuel Böhm (Presenting Author); Andreas Rausch (Co-Author)

SIG 01 Meeting 17:30–18:30 Location: HS 15.14

SIG 01 Meeting

SIG 03 Meeting 17:30–18:30 Location: HS 02.21

SIG 03 Meeting

SIG 05 Meeting SIG 05 Meeting	17:30–18:30	Location: HS 15.05
SIG 06 & 07 Meeting SIG 06 & 07 Meeting	17:30–18:30	Location: HS 15.13
SIG 09 Meeting SIG 09 Meeting	17:30–18:30	Location: HS 02.23
SIG 11 Meeting SIG 11 Meeting	17:30–18:30	Location: HS 15.03
SIG 13 Meeting SIG 13 Meeting	17:30–18:30	Location: HS 15.11
SIG 15 Meeting SIG 15 Meeting	17:30–18:30	Location: HS 15.04
SIG 17 Meeting SIG 17 Meeting	17:30–18:30	Location: HS 15.06
SIG 19 Meeting SIG 19 Meeting	17:30–18:30	Location: HS 02.01

SIG 21 Meeting	17:30-18:30	Location: HS 15.02
SIG 21 Meeting		
SIG 25 Meeting	17:30–18:30	Location: SZ 15.21
SIG 25 Meeting		
SIG 27 Meeting	17:30-18:30	Location: HS 15.12
SIG 27 Meeting		
SIG 02 Meeting	18:30–19:30	Location: HS 02.11
SIG 02 Meeting		
SIG 04 Meeting	18:30-19:30	Location: HS 15.13
SIG 04 Meeting	10.00	Docation, 115 10:10
SIG 08 Meeting	18:30–19:30	Location: HS 15.03
SIG 08 Meeting		
SIG 10 Meeting	18:30-19:30	Location: HS 15.05
SIG 10 Meeting	19:90–19:90	Location: 115 15.05
SIG 12 Meeting	18:30–19:30	Location: HS 15.02
SIG 12 Meeting		
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SIG 14 Meeting	18:30–19:30	Location: HS 15.04
SIG 14 Meeting		
SIG 16 Meeting	18:30–19:30	Location: HS 15.14
SIG 16 Meeting		
SIG 18 Meeting	18:30–19:30	Location: HS 02.01
SIG 18 Meeting		
SIG 20 Meeting	18:30–19:30	Location: HS 02.23
SIG 20 Meeting		
SIG 22 Meeting	18:30–19:30	Location: HS 15.11
SIG 22 Meeting		
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SIG 24 Meeting	18:30–19:30	Location: SZ 15.21
SIG 24 Meeting		
SIG 26 Meeting	18:30–19:30	Location: HS 02.21
	10.00 13.00	- Location, 115 02.21
SIG 26 Meeting		
SIG 28 Meeting	18:30–19:30	Location: HS 15.06
SIG 28 Meeting		

# WEDNESDAY, 27 AUGUST 2025

Running with the Presidents 00:00-NA Location: 1B.	Running with the Presidents	$06:00\mathrm{-NA}$	Location: TBA
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Running with the Presidents

Session I 01 08:30–10:00 Location: SR 15.48

# Role of Individual and Contextual Factors in School and Beyond

#### Chair

Juliana do Amaral

Mentalization at school: An adaptation of the Mediational Intervention for Sensitizing Caregivers (Poster Presentation)

Anna Ciraso-Calí (Presenting Author); Borja Aguado (Co-Author); Esther Nadal-Escolà (Co-Author); Helena Roig-Ester (Co-Author); Sergi Ballespí (Co-Author)

The associations between Social Outsiderhood and School Absence is mediated by Internalized symptoms (Poster Presentation)

Katarina Alanko (Presenting Author)

School Psychology: Perspectives of Teachers and Principals on School Wellbeing and Primary Needs (Poster Presentation)

Maria Cristina Matteucci (Presenting Author); Sophia Corridore (Co-Author); Nadia Dario (Co-Author); Enrico Deleo (Co-Author); Sergio Di Sano (Co-Author); Consuelo Mameli (Co-Author); Pina Marsico (Co-Author); Monica Mollo (Co-Author); Patrizia Selleri (Co-Author)

Do personality traits affect performance in university selection interviews of prospective teachers? (Poster Presentation)

Robin Göller (Presenting Author); Larissa Altenburger (Co-Author); Michael Besser (Co-Author); Dominik Schlüter (Co-Author)

School and individual competition, cooperation, and loneliness across adolescence (Poster Presentation)

Marguerite Beattie (Presenting Author); Noona Kiuru (Co-Author); Florencia Sortheix (Co-Author); Brett Laursen (Co-Author); Katariina Salmela-Aro (Co-Author); Junlin Yu (University of Helsinki)

Moral Disengagement, Social Goals, and Relationships as Predictors of Students' Roles in Bullying (Poster Presentation)

Tina Pirc (Presenting Author); Sonja Pecjak (Co-Author)

Session I 02 08:30–10:00 Location: SR 15.42

## Narratives, creativity and meaning-making in educational transitions and learning

#### Chair

Martin Rehm

The power of metaphors to communicate about first-semester experience (Poster Presentation)

Franziska Zellweger (Presenting Author); Iris Hauser (Co-Author)

Pretend play and creativity in early years: A longitudinal study from pre-K to first grade. (Poster Presentation)

Valeska Grau Cardenas (Presenting Author); Fernanda Rufs (Co-Author); Magdalena Fuenzalida (Co-Author); Camila Eyheralde (Co-Author); Daniela Lagos (Co-Author); Javiera Ramirez (Co-Author); David Preiss (Co-Author); Katherine Strasser (Co-Author)

Storytelling and social robots: A pilot study (Poster Presentation)

Susanna Siu-sze Yeung (Presenting Author); Sheung Ting Tammy Law (Co-Author)

Sketchnoting as a creative activity for learning from science text - A cross-cultural approach (Poster Presentation)

Laura Ohmes (Presenting Author)

Pathways to professional identities: small stories of educational leaders (Poster Presentation)

Kirsi-Marja Heikkinen (Presenting Author); Elina Fonsén (Co-Author); Lauri Heikonen (Co-Author); Raisa Carpelan (Co-Author); Arto Kallioniemi (Co-Author)

Unveiling Children's Perspectives on the Transition from Early Childhood Education to School (Poster Presentation)

Tone Rove Nilsen (Presenting Author); Anne-Lene Skog Dahl (Presenting Author); Guro Lien (Co-Author); Hanne-Mette Vindvik (Co-Author)

Session I 03 08:30–10:00 Location: SR 15.44

#### Games and Advanced Digital Tools in Education

#### Chair

Melis Dülger

The impact of Escape Room Games on enhancing problem solving skills in youth:
A systematic review (Poster Presentation)

Lingran Xu (Presenting Author); Deng Hao (Co-Author)

"We would make the best out of this situation" – students' reflect about collaborative learning (Poster Presentation)

Sebastian Strauß (Presenting Author); Julia Eberle (Co-Author)

Augmented reality for embodied learning of anatomy (Poster Presentation)

Christa Maurer (Presenting Author); Yusuf Cakmak (Co-Author); Niels Hammer (Co-Author)

Fostering Communication, Collaboration, and Creativity in Early Childhood with Robots: A Case Study (Poster Presentation)

Duygu Umutlu (Presenting Author); Mutlu Sen Akbulut (Co-Author); Simge Cicek (Co-Author); Betul Polat (Co-Author)

Identifying games to promote discussions on environmental issues using natural language processing (Poster Presentation)

Moritz Edlinger (Presenting Author); Stefan Huber (Co-Author); Marie Kogler (Co-Author); Manuel Ninaus (Co-Author)

Effectiveness of Serious Games on Healthcare Students' Interprofessional Communication: A Review (Poster Presentation)

Juming Jiang (Presenting Author); Megan Zichen Ye (Co-Author); Tyrone Tai-On Kwok (Co-Author)

Session I 04 08:30–10:00 Location: SR 15.43

## The Importance of Parents' Involvement

#### Chair

Frank Reinhold

Adult-child joint media engagement for children aged 3-7: patterns, structure and predictors (Poster Presentation)

Sandra Mathers (Presenting Author); Daniela Singh (Co-Author); Fiona Jelley (Co-Author); Alex Hodgkiss (Co-Author); Victoria Murphy (Co-Author)

Family-School Relationship: Key to Inclusion of Migrant Children in Chilean Education System (Poster Presentation)

Paulina Pizarro (Presenting Author); Francisca Romo (Co-Author)

Maternal External Regulation and Children's School Readiness (Poster Presentation) Lihi Sarfaty (Presenting Author); Adar Ben-Eliyahu (University of Haifa)

What Counts? Parents' Beliefs About Effective Math Learning at Home (Poster Presentation)

Besjanë Krasniqi (Presenting Author); Susan Sonnenschein (Co-Author); Michele Stites (Co-Author)

Tech-Based Parental Involvement in Middle School: Using Learning Management Systems at Home (Poster Presentation)

Valérie Thomas (Presenting Author); Christophe Kegels (Co-Author)

Impact of Parental Involvement and Academic Engagement on Primary Student's Achievement in Spain (Poster Presentation)

Débora Areces (Co-Author); Tania Pasarín-Lavín (Co-Author); Gintautas Silisnkas (Co-Author); Amanda Abín Álvarez (University of Oviedo)

Session I 05 08:30–10:00 Location: SR 15.45

#### Language development and reading instruction

#### Chair

Nadia Leroy

Primary school students' perceptions of multilingualism in the school context (Poster Presentation)

Rebecca Höhr (Presenting Author); Astrid Jurecka (Co-Author); Anna Volodina (Co-Author); Ilonca Hardy (Co-Author)

Reading and answering questions under learning situations: Impact of school level and availability (Poster Presentation)

Mônica Macedo-Rouet (Presenting Author); Giannina Bustamante Oliva (Co-Author); Raquel Cerdan (Co-Author)

Effectiveness of phonics instruction in India: findings from a randomized control trial (Poster Presentation)

Deepti Bora (Presenting Author); Priyanka Patel (Co-Author); Jenni Ruotsalainen (Co-Author); Ulla Richardson (Co-Author); Minna Torppa (Co-Author); Maria Psyridou (University of Oslo)

Improvement reading skills with a computerized tool based on concept maps: EPI (Poster Presentation)

Marisol Cueli (Presenting Author); Rebeca Cerezo (Co-Author); Daniel Fernandez-Lanvin (Co-Author); Paloma Gonzalez-Castro (Co-Author); Alejandro Alvarez-Varela (Universidad de Oviedo)

A meta-analysis on the relations between socioeconomic factors and oral language (Poster Presentation)

Michelle N. Maurer (Presenting Author); Anna E. Gwenlock (Co-Author); Diego Gonzalez Campos (Co-Author); Courtenay Norbury (Co-Author); Monica melby-lervåg (Co-Author)

Digital reading instruction - easy to implement, but also effective? (Poster Presentation)

Samuel Bellinghausen (Presenting Author); Mareike Ehlert (Co-Author); Elmar Souvignier (Co-Author)

Session I 06 08:30–10:00 Location: HS 02.11

# Potentials and Challenges on the Road to Rome: Promoting Self-Regulated Learning with Digital Tools

## Chair

Carmen Nadja Hirt; Lyn Lim **Discussant** 

Nikol Rummel

Potentials and Challenges on the Road to Rome: Promoting Self-Regulated Learning with Digital Tools (Symposium)

Detecting groups' regulatory triggers with AI – How learners respond to invitations for regulation (Single Paper)

Anni-Sofia Roberts (Presenting Author); Joni Lämsä (Co-Author); Justin Edwards (Co-Author); Sanna Järvelä (Co-Author)

Supporting goal attainment using a conversational agent: The effect of monitoring and reflection (Single Paper)

Martine Baars (Presenting Author); Gabrielle Martins Van Jaarsveld (Co-Author); Jacqueline Wong (Co-Author); Marcus Specht (Co-Author); Fred Paas (Co-Author)

Towards Learner-Driven SRL Tools: How Students Regulate and Interact with a genAI Chatbot (Single Paper)

Lyn Lim (Presenting Author); Maria Bannert (Co-Author)

Digital interventions to promote self-regulated learning in school education: A systematic review (Single Paper)

Carmen Nadja Hirt (Presenting Author); Alex de Pape (Co-Author); Yves Karlen (Co-Author); Joachim Wirth (Ruhr University Bochum)

Session I 07 08:30–10:00 Location: HS 11.01

## Navigating Educational Futures: The Evolution of Delphi Studies in Educational Research

Chair

Carsten Quesel **Discussant**Georg Krammer

The utilization of a Delphi study to harness the expertise of entrepreneurs (Single Paper)

Camilla Highfield (Presenting Author); Bethany Hardie (Co-Author); Kerry Lee (Yew Chung College of Early Childhood Education)

Perspectives of advocacy coalitioning in the light of a Swiss Delphi study on education policy (Single Paper)

Carsten Quesel (Presenting Author); Michael Mittag (Co-Author); Guido Möser (Co-Author)

Using the Delphi method in educational research: A case study with educational professionals (Single Paper)

Emily Oxley (Presenting Author); Hannah Nash (Co-Author); Anna Weighall (Co-Author)

Navigating Educational Futures: The Evolution of Delphi Studies in Educational Research (Symposium)

Exploring Alternative Futures of Finnish Comprehensive Schools through the Delphi Method (Single Paper)

Paivi Nilivaara (Presenting Author); Tiina Soini-Ikonen (Co-Author)

Session I 08 08:30–10:00 Location: HS 46.01

## The development of students' self-concept and task values across school years

Chair

Kati Vasalampi **Discussant** Eija Pakarinen Gendered longitudinal task value profiles in middle school science (Single Paper) Janica Vinni-Laakso (Presenting Author); Lauri Hietajärvi (Co-Author); Katariina Salmela-Aro (Co-Author)

Engagement in upper secondary school: The role of self-concept, mental health, and teacher support (Single Paper)

Maren Tvedt (Presenting Author); Kati Vasalampi (Co-Author); Tuomo Virtanen (Co-Author)

Self-concept and task values in literacy and math during transition to upper secondary education (Single Paper)

Kati Vasalampi (Presenting Author); Diana Raufelder (Co-Author); Olga Steinberg (Co-Author); Jaana Viljaranta (Co-Author)

The development of students' self-concept and task values across school years (Symposium)

Elementary School Students' Development of Interest and Academic Self-Concept in Literacy and Math (Single Paper)

Frances Hoferichter (Presenting Author); Diana Raufelder (Co-Author); Eija Pakarinen (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author)

Session I 09 08:30–10:00 Location: HS 11.03

#### Motivational-affective Dynamics in Classrooms

Chair

Rebecca Lazarides

Discussant

Lars-Erik Malmberg

Transmissions of lesson-specific emotions between teachers and students during a school week (Single Paper)

Sanni Pöysä (Presenting Author); Joona Muotka (Co-Author); Kati Vasalampi (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author)

Machine-learning assessed teacher nonverbal behaviour links teacher emotion and student motivation (Single Paper)

Rebecca Lazarides (Presenting Author); Jonas Frenkel (Co-Author); Martin Daumiller (Co-Author); Richard Goellner (Co-Author)

Improving situational engagement in a video-based and web-mediated teacher coaching intervention (Single Paper)

Ella Bjerga Pettersen (Presenting Author); Sigrun Ertesvåg (Co-Author); Tuomo Virtanen (Co-Author); Grete Sørensen Vaaland (Co-Author)

Motivational-affective Dynamics in Classrooms (Symposium)

Dynamic relationship between teacher emotions and self-efficacy: An experience sampling study (Single Paper)

Irena Burić (Presenting Author); Rebecca Lazarides (Co-Author)

Session I 10 08:30–10:00 Location: HS 02.21

Towards a sustainable transition from teacher education to profession: Insights from four countries

Chair

Per Simfors

Discussant

Peter Grav

Organiser

Marianna Efstathiadou

Towards a sustainable transition from teacher education to profession: Insights from four countries (Symposium)

"Harder than you think" – Transitioning into teaching from the perspectives of students and teachers (Single Paper)

Per Simfors (Presenting Author); Ann-Sofi Wedin (Co-Author)

Inclusion-sensitive teacher education in Germany: challenges and experiences (Single Paper)

Melana Kalpakidou (Presenting Author); Wiedenhorn Thomas (Presenting Author); Ann-Christin Faix (Co-Author); Annette Textor (Co-Author); Markus Janssen (Co-Author)

A Norwegian Perspective on the Challenges in Transition from Teacher Education to Teacher Profession (Single Paper)

Monika Merket (Presenting Author); Karen Birgitte Dille (Co-Author); Katrine Alterhaug (Co-Author)

From teacher education to teaching practice: The challenges of the transition (Single Paper)

Marianna Efstathiadou (Presenting Author); Loucas Louca (Co-Author)

Session I 11 08:30–10:00 Location: HS 15.13

Professional Competences of Mathematics Teachers: New Perspectives and Further Developments

Chair

Esther Brunner; Gabriele Kaiser **Discussant** 

Jon Star

Professional Competences of Mathematics Teachers: New Perspectives and Further Developments (Symposium)

Teacher competence, teaching quality and student outcomes in classes of different compositions (Single Paper)

Trude Nilsen (Presenting Author); Wangqiong Ye (Co-Author)

Learning to Teach Ambitiously: Focusing on the Co-Development of Teachers' Competences and Practice (Single Paper)

Charalambous (Presenting Author)

Comparison of professional competences between pre-service mathematics teachers and mentor teachers (Single Paper)

Esther Brunner (Presenting Author); Sanja Stankovic (Co-Author); Marco Galle (Co-Author); Sonja Hiebler (Co-Author); Annelies Kreis (Co-Author)

Relations of task potential, teaching quality, and teacher competence in mathematics classrooms (Single Paper)

Armin Jentsch (Presenting Author); Ann-Kristin Glegola (Co-Author); Johannes König (Co-Author); Gabriele Kaiser (Co-Author)

Session I 12 08:30–10:00 Location: HS 25.11

Addressing diverse student needs: Cognitive and socio-emotional resources for educational success

Chair

Julia Holzer

Addressing diverse student needs: Cognitive and socio-emotional resources for educational success (Symposium)

Longitudinal Links between Socio-Emotional Factors, Academic Achievement and Subjective Well-Being (Single Paper)

Helene Eckert (Presenting Author); Linda Wirthwein (Co-Author); Ricarda Steinmayr (Co-Author)

Profiles of School Well-Being: Exploring Differences in Achievement and Achievement-Related Outcomes (Single Paper)

Sina Ludwig (Presenting Author); Julia Holzer (Co-Author); Manfred Prenzel (Co-Author); Barbara Schober (Co-Author); Marko Lüftenegger (Co-Author)

Executive functioning, metacognition, and self-concept: Links to school well-being and achievement  $({\rm Single~Paper})$ 

Julia Holzer (Presenting Author); Mélanie Maximino Pinheiro (Co-Author); Grégoire Borst (Co-Author)

The role of executive functions, metacognition, and social-emotional skills in SES-achievement gaps (Single Paper)

Lys-Andréa Brunet (Presenting Author); Margot Rémeau (Co-Author); Mélanie Maximino Pinheiro (Co-Author); Olivier Houdé (Co-Author); Grégoire Borst (Co-Author)

Session I 13 08:30–10:00 Location: HS 02.01

Let's get digital: The role of school leaders in the digital transformation process in schools

Chair

Florian Sievert; Maria-Luisa

Schmitz

Discussant

Margus Pedaste

Let's get digital: The role of school leaders in the digital transformation process in schools (Symposium)

Individual & Behavioral Characteristics of Digitally Successful School Leaders – A Systematic Review (Single Paper)

Florian Sievert (Presenting Author); Dirk Richter (Co-Author); Katharina Scheiter (Co-Author)

Fostering teacher collaboration for technology integration: Influence of transformational leadership (Single Paper)

Maria-Luisa Schmitz (Presenting Author); Chiara Antonietti (Co-Author); Tessa Consoli (Co-Author); Philipp Gonon (Co-Author); Dominik Petko (Co-Author); Alberto Cattaneo (Swiss Federal University for Vocational Education and Training)

The influence of school leadership on early career teachers' ICT related self-efficacy expectations (Single Paper)

Claudia Menge (Presenting Author); Luisa Grützmacher (Co-Author); Julia Gerick (Co-Author)

Digitalization in Swiss vocational schools: the critical role of school leadership behavior (Single Paper)

Andreas Harder (Presenting Author); Stephan Schumann (Co-Author); Serge Imboden (Co-Author)

Session I 14 08:30–10:00 Location: HS 44.11

Mindfulness as education: Inner development for individual, societal, and planetary health

Chair

Dominik Weghaupt

Discussant

Nils Altner

Embodied pro-democratic, impact conscious teaching skills. Inner development for future education (Single Paper)

Nils Altner (Presenting Author)

Is mindfulness practice just a psychological intervention? Exploring its pedagogical dimensions (Single Paper)

Dominik Weghaupt (Presenting Author)

Evaluating a school-based mindfulness training: Adding children's voices to a block-randomized trial (Single Paper)

Regula Neuenschwander (Presenting Author); Leandra Aerne (Co-Author); Detlev Vogel (Co-Author); Cecile Tschopp (Co-Author)

Mindfulness as education: Inner development for individual, societal, and planetary health (Symposium)

The Mindful Teachers Program: An intervention to promote prosocial and proenvironmental behavior (Single Paper)

Susanne Krämer (Presenting Author); Kunzmann Ute (Co-Author); Laura S. Loy (Co-Author); Maria Karpova (Co-Author); Elisabeth S. Blanke (Co-Author)

Session I 15 08:30–10:00 Location: HS 11.02

Exploring Visual Attention Through Wearable Eye Tracking Across Authentic Learning Contexts

Chair

Christine van Nooijen; Ellen Kok **Discussant** 

Halszka Maria Jarodzka

Exploring Visual Attention Through Wearable Eye Tracking Across Authentic Learning Contexts (Symposium)

Expert teacher feedback for novice teacher professional vision development in higher education (Single Paper)

Lina Kaminskienė (Presenting Author); Kateryna Horlenko (Co-Author); Vaida Jurgilė (Co-Author)

Student task-avoidance moderate link between teacher-student relations and teacher visual attention (Single Paper)

Saswati Chaudhuri (Presenting Author); Eija Pakarinen (Co-Author); Heli Muhonen (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author)

Domain and education specialists' visual inspection and reflection of historical milieus (Single Paper)

Marjaana Puurtinen (Presenting Author); Jan Lofstrom (Co-Author)

Exploring joint visual attention during forensic feature comparison in expert-novice dyads (Single Paper)

Christine van Nooijen (Presenting Author); Bjorn de Koning (Co-Author); Ellen Kok (Co-Author); Anna Isahakyan (Co-Author); Maryam Asoodar (Co-Author); Fred Paas (Erasmus University Rotterdam; University of New South Wales)

Session I 16 08:30–10:00 Location: HS 02.23

Exploring Well-Being and Burnout in Teaching: Integration of Individual and Contextual factors

Chair

Uta Klusmann

Discussant

Tina Hascher

Organiser

Katharina Asbury

Exploring Well-Being and Burnout in Teaching: Integration of Individual and Contextual factors (Symposium)

The Role of School Context in Teachers' Well-Being: A Cross-Country Analysis Using PISA 2022 Data (Single Paper)

Tabea Schulze-Hagenest (Presenting Author); Bastian Carstensen (Co-Author); Gyde Wartenberg (Co-Author); Oliver Lüdtke (Co-Author); Uta Klusmann (Co-Author)

Does the School Context Really Matter for Teacher Burnout? (Single Paper)

Filip Van Droogenbroeck (Presenting Author); Bram Spruyt (Co-Author); Valérie Quittre (Co-Author); Dominique Lafontaine (Co-Author)

Does a Growth Mindset in STEM Subjects Predict the Well-being of Prospective Teachers? (Single Paper)

Katharina Asbury (Presenting Author); Bastian Carstensen (Co-Author); Uta Klusmann (Co-Author)

Perceived Social-Emotional Competence: Examining Job Factors and Links with Well-Being (Single Paper)

Rebecca Collie (Presenting Author)

Session I 17 08:30–10:00 Location: HS 15.02

Advancing Motivational Research: Teacher Motivational Messages and Relations with Student Outcomes

Chair

Wendy Symes

Advancing Motivational Research: Teacher Motivational Messages and Relations with Student Outcomes (Symposium)

Do teacher value-promoting messages impact students' expectancy, value, achievement and aspirations? (Single Paper)

David Putwain (Presenting Author); Andrea Mallaburn (Co-Author); Hanna Gaspard (Co-Author)

Towards the automatic evaluation of teachers' discourse: The case of engaging messages  $(\mathrm{Single\ Paper})$ 

Jaime León (Presenting Author); Samuel Falcon (Co-Author)

Assessing Pre-service Teachers' Motivational Messages with a Large Language Model (Single Paper)

Olivia Metzner (Presenting Author); Yindong Wang (Co-Author); Gerard de Melo (Co-Author); Rebecca Lazarides (Co-Author)

Session I 18 08:30–10:00 Location: HS 03.01

The use of generative AI models in learning and instruction: A collection of systematic reviews

Chair

Cindy Hmelo-Silver

Discussant

Michael Sailer

Organiser

Freydis Vogel

The use of generative AI models in learning and instruction: A collection of systematic reviews (Symposium)

Improving AI-related knowledge and skills in teacher education: A synthesis of empirical research (Single Paper)

Ismail Celik (Presenting Author); Piia Naykki (Co-Author); Jari Laru (Co-Author); Signe Pirkko Siklander (Co-Author); Kati Mäkitalo (Co-Author)

K-12 teachers' use of AI for various student-focused purposes: Preliminary insights via rapid review (Single Paper)

Meg Farrell (Presenting Author); Linyuan Zhang (Co-Author); Olenka Maythe Pando Cotrina (Co-Author); Beril Eren (Co-Author); Begüm Arvaneh (Co-Author); Maximilian Knogler (Co-Author); Doris Holzberger (Co-Author); Fabian Reinwarth (Co-Author); Sabrina Reith (Co-Author); Tina Seidel (Co-Author)

The use of generative AI in collaborative learning: A scoping review (Single Paper) Maya Persico (Presenting Author); Daeun Hong (Co-Author); Zach Ryan (Co-Author); Mengxi Zhou (Co-Author); Jerika Miller (Co-Author); Freydis Vogel (Co-Author); Cindy Hmelo-Silver (Co-Author)

Chatbots and student motivation: The evidence we have and research we need (Single Paper)

Weijiao Huang (Presenting Author); Juming Jiang (Co-Author); Luke Fryer (Co-Author)

Session I 19 08:30–10:00 Location: HS 15.04

### Navigating Cognitive Challenges in Multilingual Education: From Experimental Insights to Practice

Chair

Henrik Saalbach **Discussant** 

Bert De Smedt Organiser

Moritz Wußing

Navigating Cognitive Challenges in Multilingual Education: From Experimental Insights to Practice (Symposium)

Assessing Science Proficiency in Two Languages: A Study of Bilingual Primary School Students (Single Paper)

Sandra Preusler (Presenting Author); Steffen Zitzmann (Co-Author); Jürgen Baumert (Co-Author); Jens Möller (Co-Author)

A Novel Diagnostic Test Battery for Math Learning Disorder in a Multilingual Education Context (Single Paper)

Vera Hilger (Presenting Author); Linda Romanovska (Co-Author); Sonja Ugen (Co-Author); Christine Schiltz (Co-Author)

Language-switching and Language-proficiency Costs: Challenges in Bilingual Mathematical Learning (Single Paper)

Moritz Wußing (Presenting Author); Kevin Baumschlager (Co-Author); Roland H. Grabner (Co-Author); Henrik Saalbach (Co-Author)

The Bilingual Math Dilemma: Language Switching Costs in Arithmetic Learning (Single Paper)

Kevin Baumschlager (Presenting Author); Cornelia Pachner (Co-Author); Moritz Wußing (Co-Author); Henrik Saalbach (Co-Author); Roland H. Grabner (Co-Author)

Session I 20 08:30–10:00 Location: HS 15.05

# Hybridizing motivational strains: How integrative models can advance motivation science

hair

Daniel Dinsmore; Ronnel Bor-

nasal King **Discussant** 

Luke Fryer Organiser

Patricia Alexander

Hybridizing motivational strains: How integrative models can advance motivation science (Symposium)

Overcoming Fragmentation in Motivation Science: Why, When, and How Should We Integrate Theories? (Single Paper)

Reinhard Pekrun (Presenting Author)

A Theoretical and Metatheoretical Reframing of the Development of Cognitive Processing and Learning (Single Paper)

Daniel Dinsmore (Presenting Author); Luke Fryer (Co-Author); Denis Dumas (University of Georgia)

Teacher Expectations and Self-Determination Theory: Convergence and Divergence of Theories (Single Paper)

Lisette Hornstra (Presenting Author); Christine Rubie-Davies (Co-Author); Kim Stroet (Co-Author); Annaline Flint (Co-Author)

Toward an organizing theoretical model for teacher clarity, feedback, and self-efficacy (Single Paper)

Martijn Leenknecht (Presenting Author); Luke Fryer (Co-Author)

Session I 21 08:30-10:00 Location: HS 12.01

Optimizing Learning with Videos: Insights from Media Comparison, Design, and Long-Term Impact

Chair Tino Endres Discussant

Margot van Wermeskerken

Learning Across Age Groups (Single Paper) Martin Merkt (Presenting Author)

Accelerating Knowledge? Examining the Impact of Video Playback Speed on

The Video Dilemma: Length of a Course is an Important Factor When Choosing Video as a Medium (Single Paper)

Kevin Ackermans (Presenting Author); Bjorn de Koning (Co-Author)

Which Multimedia Principle(s) Should my Instructional Video Follow? An Experimental Study (Single Paper)

Juliette Désiron (Presenting Author); Margot van Wermeskerken (Co-Author); Marie-Christin Krebs (Co-Author); Tino Endres (Co-Author)

Optimizing Learning with Videos: Insights from Media Comparison, Design, and Long-Term Impact (Symposium)

Effects of Giving Learners a Choice on Learning With Text and Explainer Video (Single Paper)

Marie-Christin Krebs (Presenting Author); Alexander Eitel (Co-Author)

Session I 22 08:30-10:00 Location: HS 15.03

The Potential of Video Data Capturing Emotions and their regulation in Collaborative Learning

Chair

Tiina Törmänen

Discussant

Toni Rogat

Organiser

Hanna Jarvenoja

Capturing the Formation and Regulation of Emotions in Collaborative Learning: FRECL Coding Procedure (Single Paper)

Shasha Li (Presenting Author); Nikki Lobczowski (Co-Author); Luyao Xu (Co-Author)

Active listening and self-disclosure: observing socioemotional presence in collaborative learning (Single Paper)

Piia Naykki (Presenting Author); Auli Lehtinen (Co-Author)

Employing an Integrated Coding Scheme for Video Data Across Collaborative Learning Environments (Single Paper)

Matthew Moreno (Presenting Author); Keerat Grewal (Co-Author); Lucia Patino (Co-Author); Negar Matin (Co-Author); Mariel Miller (Co-Author); Jason Harley (Co-Author); Allyson Hadwin (University of Victoria); Sayed Azher (McGill University)

Exploring Emotional Dynamics in Socially Shared Regulation of Learning through Video Analysis (Single Paper)

Hanna Jarvenoja (Presenting Author); Tiina Törmänen (Co-Author); Marjo Turunen (Co-Author); Emma Lehtoaho (Co-Author); Jasmiina Suoraniemi (Co-Author)

The Potential of Video Data Capturing Emotions and their regulation in Collaborative Learning (Symposium)

#### Session I 23 08:30-10:00 Location: HS 15.14

#### Fostering computational skills across development

Chair

Ferenc Kemény

Fostering computational skills across development (Symposium)

AI-Based Approaches for Advancing Computational Thinking Skills in Introductory Programming Courses (Single Paper)

Alexander Steinmaurer (Presenting Author)

The Cognitive Predictors of Computational Thinking: Examining Students of Different Disciplines (Single Paper)

Julia Pöschko (Presenting Author); Ferenc Kemény (Co-Author); Karin Landerl (Co-Author)

Computational Thinking for Holistic Skill Development including Entrepreneurship and Green Skills (Single Paper)

Bernadette Spieler (Presenting Author); Melanie Kieber (Co-Author); Harald Burgsteiner (Co-Author); Martin Kandlhofer (Co-Author); Tobias M. Schifferle (Co-Author)

Can universal computational thinking programs be effective for all? (Single Paper) Barbara Arfé (Presenting Author); Chiara Montuori (Co-Author); Costanza Padova (Co-Author); Lucia Ronconi (Co-Author); Gabriele Pozzan (University of Padova); Tullio Vardanega (University of Padova)

08:30-10:00 Session I 24 Location: HS 01.15

## The Influence of the Social Environment on Learning and Self-Regulation Across Development

Chair

Ulrich Dettweiler

Discussant

Gayannee Kedia

Organiser

Emilie Caspar; Mina Movahedi;

Stefan Reiss; Stefanie Hoehl

The Influence of the Social Environment on Learning and Self-Regulation Across **Development** (Symposium)

Fostering academic success through a supervised peer-mentoring program for firstyear students (Single Paper)

Stefan Reiss (Presenting Author); Anna Schreiner (Co-Author); Janine Stollberg (Co-Author); Eva Jonas (Co-Author)

Learning Self-Control: The Impact of Observational Learning on Near and Far Transfer (Single Paper)

Mina Movahedi (Presenting Author); Gayannee Kedia (Co-Author)

The neuroscience of (dis)obedience (Single Paper)

Emilie Caspar (Presenting Author)

Over-imitation as a social glue: New insights from experiments with preschoolers

(Single Paper)

Stefanie Hoehl (Presenting Author)

Session I 25 08:30–10:00 Location: Festsaal

ADHD Symptoms and Associated Difficulties: Assessment Approaches Across Educational Stages

Chair

Katharina Jakob

Discussant

Timo Hennig

ADHD Symptoms Fluctuate Over Time: Towards Incorporating Ambulatory Assessment in Evaluating ADHD (Single Paper)

Behnaz Kiani (Presenting Author); Tomasz Moschko (Co-Author); Caterina Gawrilow (Co-Author)

Study Strategy Challenges in Higher Education Students with ADHD: A Multi-Method Analysis (Single Paper)

Dieter Baeyens (Presenting Author); Elke Emmers (Co-Author); Petra Warreyn (Co-Author)

Investigating discrepancies in behavior ratings: Findings from a longitudinal multi-informant study (Single Paper)

Katharina Jakob (Presenting Author); Akie Yada (Co-Author); Carmen Zurbriggen (Co-Author); Susanne Schwab (Co-Author); Hannu Savolainen (Co-Author)

ADHD Symptoms and Associated Difficulties: Assessment Approaches Across Educational Stages (Symposium)

Problems with relying on self-report alone when evaluating postsecondary students for ADHD (Single Paper)

Allyson Harrison (Presenting Author)

Session I 26 08:30–10:00 Location: SZ 15.21

Content of the Wandering Mind: Differentiating Task-Related Interference from Task-Unrelated Thought

Chair

Daniel Ebbert

Discussant

Marijn Gijsen

Automated Assessment of Meta-awareness of Task-Unrelated Thought during Lecture Video Watching (Single Paper)

Babette Bühler (Presenting Author); Efe Bozkir (Co-Author); Hannah Deininger (Co-Author); Patricia Goldberg (Co-Author); Peter Gerjets (Co-Author); Ulrich Trautwein (Co-Author); Enkelejda Kasneci (Co-Author)

Interpolated Tests Reduce Task-Unrelated Thoughts During Video Learning in Mathematics (Single Paper)

Irena-Vanessa Ivan (Presenting Author); Emely Hoch (Co-Author); Birgit Brucker (Co-Author); Marlit Annalena Lindner (Co-Author); Peter Gerjets (Co-Author)

Dissecting Mind Wandering in Video Learning: Task-Relatedness and Temporal patterns (Single Paper)

Gerrit Anders (Presenting Author); Jürgen Buder (Co-Author); Markus Huff (Co-Author)

Content of the Wandering Mind: Differentiating Task-Related Interference from Task-Unrelated Thought (Symposium)

Facets of a Wandering Mind: A Meta-Analysis of Task-Related Interference and Learning (Single Paper)

Daniel Ebbert (Presenting Author); Andrew Zamecnik (Co-Author); Natasha Wilson (Co-Author); Srecko Joksimovic (Co-Author); Negin Mirriahi (Co-Author); Shane Dawson (University of South Australia)

Coffee Break 10:00–10:30

Coffee Break

**KEYNOTES - PART 1 01** 

10:30-12:00

Location: Aula

Advancing Metacognitive Skills with AI and Multimodal Data in Technology-Enhanced Learning

**Chair** Gale Sinatra Advancing Metacognitive Skills with AI and Multimodal Data in Technology-

Enhanced Learning (Keynote) Roger Azevedo (Presenting Author)

**KEYNOTES - PART 1 02** 

10:30-12:00

Location: HS 62.01 Alumni-Hörsaal

Boundary Conditions for Effective Technology-Enhanced Learning and Teaching

Chair

Mireille Bétrancourt

Boundary Conditions for Effective Technology-Enhanced Learning and Teaching

(Keynote)

Katharina Scheiter (Presenting Author)

**KEYNOTES - PART 1 03** 

10:30-12:00

Location: HS 12.11

Ways with wor(l)ds: Approaching the dynamics of knowing and learning as situated practices

Chair

Debra Myhill

Ways with wor(l)ds: Approaching the dynamics of knowing and learning as situated

**practices** (Keynote)

Asa Makitalo (Presenting Author)

Session J 01 12:15–13:45 Location: SR 15.45

Affective, social and relational dimensions of learning and achievement

Chair

Claudia Gärtner

Can Social-Emotional Skills Be Developed Through a MOOC?: The role of Gender and Age (Poster Presentation)

Diego Oswaldo Camacho Vega (Presenting Author); Salvador Ponce Ceballos (Co-Author); Yessica Martínez Soto (Co-Author)

Math Achievement Gap: Social, Family & Affective Factors in a French Cohort of Elementary Students (Poster Presentation)

Lucia Manzione (Presenting Author); Margaux Ader (Co-Author); Teresa Iuculano (Co-Author)

Exposed! Linking Math Exposure with Self-Concept, State Emotions, Physiology, and Teaching Anxiety (Poster Presentation)

Franziska Eckerskorn (Presenting Author); Anne Christiane Frenzel (Co-Author); Miriam Wünsch (Co-Author)

The Role of Prior Knowledge When Students Make Choices in an Intelligent Tutoring System (Poster Presentation)

Man Su (Presenting Author); Belle Dang (Co-Author); Andy (Khanh Xuan) Nguyen (Co-Author); Tomohiro Nagashima (Co-Author)

Exploring affective and relational aspects of learning in living lab education (Poster Presentation)

Mirthe Van den Hee (Presenting Author); Dr. Joke Hermes (Co-Author); Prof. dr. Perry Den Brok (Co-Author)

Session J 02 12:15–13:45 Location: SR 15.43

#### Motivational Factors in Learning Processes and Environments

#### Chair

Lynn Van den Broeck

Realising potentials of students in higher education through authentic learning environments. (Poster Presentation)

Isabel Raemdonck (Presenting Author); Sarah Alves (Co-Author)

Perceived difficulty, performance, and interest as predictors and outcomes of self-efficacy change (Poster Presentation)

Alex Shum (Presenting Author); Luke Fryer (The University of Hong Kong)

Feedback->Self-efficacy $\Delta$ ->Interest: The dynamics relationships driving reengagement with learning (Poster Presentation)

Luke Fryer (Presenting Author); Alex Shum (Co-Author); Kaori Nakao (Co-Author); W. L. Quint Oga-Baldwin (Co-Author)

Impact of Elaborated Feedback on Vocational Students' Learning in Digital Environments (Poster Presentation)

Xiaodan ZENG (Presenting Author); Pascal Pansu (Co-Author); Salomé Cojean (Co-Author)

Self-Evaluation Bias and Autonomous Motivation: The Role of Teachers' Autonomy-Supportive Behavior (Poster Presentation)

Nadia Leroy (Presenting Author); Pascal Pansu (Co-Author)

Main & Moderating Effects of Maths & Science Self-efficacy on Girls' Intentions for University STEM (Poster Presentation)

Emma Burns (Presenting Author); Marcus Johnson (Co-Author)

Session J 03 12:15–13:45 Location: SR 15.48

## Factors Influencing Educational Policy, Management, Teachers and Students

#### Chair

Ina Alexandra Machura

Assessment of class participation online and offline: Teachers' best practices and challenges (Poster Presentation)

Patricia Simon (Presenting Author); Juming Jiang (Co-Author); Luke Fryer (Co-Author)

Financial education from a psychological perspective (Poster Presentation)

Matteo Robba (Presenting Author); Carmela Aprea (Co-Author); Paola Iannello (Co-Author); Angela Sorgente (Co-Author)

Insights from Austrian university managers on knowledge transfer and campuscommunity partnerships (Poster Presentation)

Peter Slepcevic-Zach (Presenting Author); Paul Rameder (Presenting Author); Magdalena Fellner (Co-Author); Katharina Resch (Co-Author)

The Strivers Zombie (Poster Presentation)

Daniel Robinson (Presenting Author); Howard Wainer (Co-Author)

Political Transitions and Thai Education Policies: An Analysis of the 2023 Election Manifestos (Poster Presentation)

Kampanart Chaiyarat (Presenting Author); Jatupol Sangwanglao (Presenting Author); Athapol Anunthavorasakul (Co-Author)

Factors influencing students' cognitive, behavioral, and emotional engagement (Poster Presentation)

Aurélie Huret (Presenting Author); Philippe Dessus (Co-Author); Salomé Cojean (Co-Author); Laurent LARDY (Co-Author)

Session J 04 12:15–13:45 Location: SR 15.42

#### Mathematical Learning and Achievement

#### Chair

Moritz Sahlender

Profiles of preschoolers' analog and digital home learning environments (Poster Presentation)

Susanne Enke (Presenting Author); Catherine Gunzenhauser (Co-Author); Peter Edelsbrunner (Co-Author); Henrik Saalbach (Co-Author)

The Intergenerational Impact of Mothers and Fathers on Children's Arithmetic Fluency Development (Poster Presentation)

Germán Grande (Co-Author); Monica melby-lervåg (Co-Author); Arne Lervåg (Co-Author); Tonje Amland (University of Oslo)

The role of mathematics textbooks in the understanding of fractions (Poster Presentation)

Rosario Sánchez (Presenting Author); Laura Matilla (Co-Author); Josetxu Orrantia (Co-Author); Santiago Vicente (Co-Author); David Munez (Co-Author); Paula Munoz (Co-Author)

Applying the multimedia and signaling principle to computer-based math word problems. (Poster Presentation)

Halszka Maria Jarodzka (Presenting Author); Tamara Schleepen (Co-Author)

The relationship between working memory, anxiety and mathematical ability in primary school (Poster Presentation)

Helene Vos (Presenting Author); Mila Marinova (Co-Author)

Estimation Strategies, Quantitative Reasoning and Math Achievement: how do they correlate? (Poster Presentation)

Camila Nogues (Presenting Author); Beatriz Dorneles (Presenting Author)

Session J 05 12:15–13:45 Location: SR 15.44

### AI Applications in Teaching and Learning

#### Chair

Marjaana Puurtinen

Scalable digital technologies in learning and the school of the future (Poster Presentation)

Päivi Häkkinen (Presenting Author); Piia Naykki (Co-Author); Saswati Chaudhuri (Co-Author); Auli Lehtinen (Co-Author); Héctor J. Pijeira-Díaz (Co-Author); Johanna Pöysä-Tarhonen (Co-Author); Takumi Yada (Co-Author); Emilia Ahlström (Co-Author); Francesca De Sanctis (Co-Author); Faisal Rehman Channa (Co-Author); Mitcho Hristov (Co-Author); Jenni Latva-aho (Co-Author)

The Connection Between Experiences of Using digital Technology and Beliefs of future with GenAI (Poster Presentation)

Kalle Juuti (Presenting Author); Sanna Oinas (Co-Author); Vilhelmiina Harju (Co-Author); Niklas Rosenblad (Co-Author)

Looking Backward to Move Forward: A Theoretical Path Towards a Successful Teacher-AI Collaboration (Poster Presentation)

Gerti Pishtari (Presenting Author); Milena Sarmiento-Márquez (Co-Author)

Exploring Learner-AI Interaction Types in Writing Tasks (Poster Presentation) Hyeeun Kim (Presenting Author); Young Hoan Cho (Co-Author); Bookyoung Shin (Co-Author); Yewon Han (Co-Author); Yeono Son (Co-Author); Anna Kim (Co-Author)

The Usage of AI Chatbots in University Students in the UK (Poster Presentation) Anoop Saxena (Presenting Author); Atulya Saxena (Co-Author); Hillary Rowe (Co-Author)

Students' Use of Text-Based Generative AI for Learning in Higher Education (Poster Presentation)

Maryam Alqassab (Presenting Author); Zuzanna Glogowska (Co-Author); Seyyed Kazem Banihashem (Co-Author); Halszka Maria Jarodzka (Co-Author); Hendrik Drachsler (Co-Author)

Integrating AI into Engineering Education via Project-Based Learning of Unmanned Vehicles (Poster Presentation)

Session J 06 12:15-13:45 Location: HS 02.11

Evaluating teachers digital competencies: shaping approaches, measures and tools

Chair

Maria Pannatier Discussant

Martin Merkt

A mixed approach to assess digital competence: the case of designing instructional video (Single Paper)

Corinne Ramillon (Presenting Author); Mireille Bétrancourt (Co-Author)

Empowering trainers and student teachers in development and implementation of digital competences (Single Paper)

Maria Pannatier (Presenting Author); Sunny Avry (Co-Author); Notari michele (Co-Author)

Validation of a text-based vignette instrument to assess teachers' digital competences (Single Paper)

Isabell Runge (Presenting Author); Jakob Thomas Fischer (Co-Author); Moritz Krell (Co-Author); Rebecca Lazarides (Co-Author); Katharina Scheiter (Co-Author); Florian Hebibi (Co-Author); Frauke Voitle (Co-Author)

Evaluating teachers digital competencies: shaping approaches, measures and tools (Symposium)

Using generative AI for reflection and self-assessment in an educational sciences course (Single Paper)

Vilhelmiina Harju (Presenting Author); Maja Hojer Bruun (Co-Author); Sanna Oinas (Co-Author); Niklas Rosenblad (Co-Author); Kalle Juuti (Co-Author)

Session J 07 12:15-13:45 Location: HS 15.13

Grading in primary and seconday education - Implications and innovative approaches

Chair

Nele Kampa

Discussant

Henning Fjørtoft

To grade or not to grade? Results on the effects of abandoning school grades from elementary school (Single Paper)

Nicolas Hübner (Presenting Author); Juliane Rutsch (Co-Author); Benjamin Fauth (Co-Author)

On the Relationship between Text Features and Teacher-Assigned Grades for Essays (Single Paper)

Jan Hochweber (Presenting Author); Valentin Unger (Co-Author); Fabian Grünig (Co-Author)

Teacher Grades for University Entrance Qualification: Bias, But Not as We Expected (Single Paper)

Vincent Schatz (Presenting Author); Nele Kampa (Co-Author); Roman Zviagintsev (Co-Author); Gavin Brown (Co-Author)

Grading in primary and seconday education - Implications and innovative approaches (Symposium)

Grading practices, gender bias and educational outcomes: evidence from Italy (Single Paper)

Adriana Di liberto (Presenting Author)

Session J 08 12:15–13:45 Location: HS 15.02

Evidence-based Reflections on the scope and concepts of Entrepreneurship Education Research

Chair

Tobias Jenert **Discussant** Hannah Mülder Integrating Entrepreneurship Education across Primary, Secondary and Tertiary Levels (Single Paper)

Elisabeth Riebenbauer (Presenting Author); Christian Stutzenstein (Presenting Author); Michaela Stock (Presenting Author); Peter Slepcevic-Zach (Co-Author); Jakob Stadler (Co-Author)

Social Entrepreneurship Education in teacher training as a contribution to enable everyone? (Single Paper)

Anna Benning (Presenting Author); Karl-Heinz Gerholz (Co-Author)

The Multifaceted Nature of Self-Regulation in Entrepreneurship: A Latent Class Analysis (Single Paper)

Ronja Büker (Presenting Author); Tobias Jenert (Presenting Author)

Evidence-based Reflections on the scope and concepts of Entrepreneurship Education Research (Symposium)

Entrepreneurship Education at All Levels of Education: A Systematic Literature Review (Single Paper)

Verena Liszt-Rohlf (Presenting Author); Ronja Büker (Presenting Author); Susanne Kamsker (Co-Author)

Session J 09 12:15–13:45 Location: HS 02.23

The Social Side of Professionalization in Teacher Education: Learning through Collaboration

Chair

Marco Galle

Discussant

Piet Van den Bossche

How do different actors support student teachers' learning during lesson dialogues? (Single Paper)

Sonja Hiebler (Presenting Author); Annelies Kreis (Co-Author); Marco Galle (Co-Author)

Social networks and key situations of student-teacher learning regarding teaching (Single Paper)

Marco Galle (Presenting Author); Annelies Kreis (Co-Author); Sonja Hiebler (Co-Author)

The impact of Social Learning in professionalisation networks of trainee teachers in Germany (Single Paper)

Ariane Schmidt (Presenting Author)

The Social Side of Professionalization in Teacher Education: Learning through Collaboration (Symposium)

Training, coaching or imparting? Guiding orientations of in lesson planning (Single Paper)

Julia Seyss-Inquart (Presenting Author)

Session J 10 12:15–13:45 Location: HS 11.03

Teacher expectations: Beliefs, biases, and student outcomes

Chair

Astrid Poorthuis; Lisette Hornstra

Discussant

Hanke Korpershoek

Teacher expectations: Beliefs, biases, and student outcomes (Symposium)

Teacher expectations: Curvilinear relations with students' engagement and performance pressure (Single Paper)

Lisette Hornstra (Presenting Author); Astrid Poorthuis (Co-Author); Jonne Bloem (Co-Author); Iris Boer (Co-Author)

Pre-service teachers' stereotypes and their influence on behaviour (Single Paper) Charlotte Sophie Schell (Presenting Author); Charlotte Dignath (Co-Author); Hannah Kleen (Co-Author); Nathalie John (Co-Author); Mareike Kunter (Co-Author)

The role of achievement growth in teachers' track recommendations (Single Paper) Anne van Leest (Presenting Author); Lisette Hornstra (Co-Author); Janneke van de Pol (Co-Author); Jan van Tartwijk (Co-Author)

Emphasising the teacher in teacher expectation research: A narrative review (Single Paper)

Christine Rubie-Davies (Presenting Author); John Hattie (Co-Author)

Session J 11 12:15–13:45 Location: HS 25.11

Macro and Micro-level variables that shape Differentiated Instruction

Chair

Marcela Pozas

Discussant

Sepideh Hassani

Organiser

Flora Woltran; Susanne Schwab;

Verena Letzel-Alt

Macro and Micro-level variables that shape Differentiated Instruction (Symposium)

The relationship between teachers' attitudes towards differentiated instruction and perceptions (Single Paper)

Robbert Smit (Presenting Author); Eva Weingartner (Co-Author)

The need for adequate teacher training for Differentiated Instruction (Single Paper) Verena Letzel-Alt (Presenting Author); Flora Woltran (Co-Author); Marcela Pozas (Co-Author)

Pre-service primary teachers' perceptions of differentiated instruction (Single Paper) Sérgio Gaitas (Presenting Author); Cátia Carêto (Co-Author)

How is differentiation communicated in Australian publicly available documents (Single Paper)

Tom Porta (Presenting Author); Gemma Scarparolo (Co-Author)

Session J 12 12:15–13:45 Location: HS 15.05

### Investigating the (Perceived) Quality of Teaching and Learning in the Classroom

Chair

Boris Eckstein **Discussant** 

Courtney Bell

Observing Instructional Practice: Can We Consistently Measure Teaching Quality Constructs? (Single Paper)

Mark White (Presenting Author); Armin Jentsch (Co-Author); Jennifer Maria Luoto (Co-Author); Kirsti Klette (Co-Author)

From Individual to Collective: Investigating Teachers' Beliefs and Practices in Science Education (Single Paper)

José Hernández Quintero (Presenting Author); Elisa Kupers (Co-Author); Mayra Mascareño Lara (Co-Author); Marijn Van Dijk (Co-Author); Sylvia Rojas-Drummond (Co-Author)

Explaining Inconclusive Effects of Cognitive Activation: Do Moderated and Mediated Effects Help? (Single Paper)

Charalambos Charalambous (Presenting Author); Anna-Katharina Praetorius (Co-Author); Carmen Köhler (Co-Author); Zhenzhen Miao (Co-Author)

Investigating the (Perceived) Quality of Teaching and Learning in the Classroom (Symposium)

Investigating the Quality of Pedagogical Interactions – Results from the INTAKT Pilot Study (Single Paper)

Boris Eckstein (Presenting Author); Laura Schwitter (Co-Author); Alexander Wettstein (Co-Author); Urs W. Grob (Co-Author); Benjamin Fauth (Co-Author)

Session J 13 12:15–13:45 Location: HS 44.11

### Teacher-Child relationships in ECE: links with EF, social competence, and culture

Chair

Fren Dieusaert

Discussant

Dieuwer ten Braak

Teacher-Student Relationship and Executive Function in Collectivistic Cultures (Single Paper)

Canmei Xu (Presenting Author); Mariette Huizinga (Co-Author); Qiong Zhang (Co-Author); Dieter Baeyens (Co-Author)

Teacher-child relationships moderating the efficacy of executive function interventions in preschool (Single Paper)

Fren Dieusaert (Presenting Author); Dieter Baeyens (Co-Author); Jantine Spilt (Co-Author)

Teacher-student relationships, student social competence, and achievement strategies in kindergarten (Single Paper)

Dini Rahmawati (Presenting Author); Sanni Pöysä (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author); Eija Pakarinen (Co-Author)

Teacher-Child relationships in ECE: links with EF, social competence, and culture (Symposium)

Cross-cultural differences in preschool teachers' perceptions of teacher-child emotional dependency  $(\mathrm{Single\ Paper})$ 

Sofie Hendrix (Presenting Author); Jantine Spilt (Co-Author); Joana Cadima (Co-Author); Ana Camacho (Co-Author); Tiago Ferreira (Co-Author); Athanasios Gregoriadis (Co-Author); Helma Koomen (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author); Andrea Eva Otero Mayer (Co-Author); Iwona Omelańczuk (Co-Author); Eija Pakarinen (Co-Author); Jochem Thijs (Co-Author); Olga Wysłowska (Co-Author); Karine Verschueren (Co-Author)

Session J 14 12:15–13:45 Location: HS 01.15

Cognitive and Motivational Individual Differences in the Effectiveness of Desirable Difficulties

Chair

Mirjam Ebersbach; Sterre

Ruitenburg **Discussant** 

Carolina Kuepper-Tetzel

Cognitive and Motivational Individual Differences in the Effectiveness of Desirable Difficulties (Symposium)

The Interplay of Effort Beliefs and Goal Orientation in Promoting the Use of Interleaved Practice (Single Paper)

Roman Abel (Presenting Author); Julian Roelle (Co-Author)

A Multi-verse Lack of Replication for Working Memory Capacity as Moderator of Perceptual Disfluency (Single Paper)

Sophia Christin Weissgerber (Presenting Author); Ralf Rummer (Co-Author)

Initial Practice Performance Moderates the Spacing Effect in Complex Procedural Knowledge (Single Paper)

Sterre Ruitenburg (Presenting Author); Pieter Guldemont (Co-Author); Halszka Maria Jarodzka (Co-Author); Gino Camp (Co-Author); Paul Kirschner (Open University of the Netherlands)

The Role of Worked Examples and Individual Differences in the Spacing Effect in Mathematics (Single Paper)

Anne Ludwig (Presenting Author); Mirjam Ebersbach (Co-Author)

Session J 15 12:15–13:45 Location: HS 46.01

What works for whom? Interventions with analogue and digital media to promote mathematical skills

Chair

Frank Niklas; Hedwig Gasteiger;

Valerie Berner

Discussant

Esther Brunner

What works for whom? Interventions with analogue and digital media to promote mathematical skills (Symposium)

Optimizing the session frequency of a board game to promote early mathematical competencies (Single Paper)

Maria-Aikaterini Chatzaki (Presenting Author); Katja Seitz-Stein (Co-Author); Valerie Berner (Co-Author)

Early math development through digital apps: Supporting preschoolers from diverse backgrounds (Single Paper)

Tina Schiele (Presenting Author); Anna Mues (Co-Author); María Valcárcel Jiménez (Co-Author); Peter Edelsbrunner (Co-Author); Valerie Berner (Co-Author); Hedwig Gasteiger (Co-Author); Frank Niklas (Co-Author)

Training children's spatial language skills improves their numerical magnitude understanding (Single Paper)

Korbinian Moeller (Presenting Author); Nadja Lindner (Co-Author); Frauke Hildebrandt (Co-Author); Marcus Hasselhorn (Co-Author); Jan Lonnemann (Co-Author)

Impact of shared book reading with or without concrete activities on patterning ability (Single Paper)

Nore Wijns (Presenting Author); Joke Torbeyns (Co-Author)

Session J 16 12:15–13:45 Location: HS 11.01

More engaged, more competent? The influence of digital and olfactory stimulation during book reading

Chair

Franziska Egert **Discussant** Sandra Mathers

Multi-perspective insights on child engagement and its influence on learning using a picturebook app (Single Paper)

Noémie Gfeller (Presenting Author); Fares Kayali (Co-Author)

Engaging preschool children during book reading. The role of device and story exposure (Single Paper)

Franziska Egert (Presenting Author); Jasmin Traum (Co-Author); Wynona Kühn (Co-Author); Anne-Kristin Cordes (Co-Author)

Influence of children's engagement and book format on emergent literacy skills (Single Paper)

Johanna Quiring (Presenting Author); Eva Heuss (Presenting Author); Kerstin Pfannes (Presenting Author); Silvana Kappeler Suter (Co-Author)

More engaged, more competent? The influence of digital and olfactory stimulation during book reading (Symposium)

Olfactory enhanced reading on children's engagement and gender differences (Single Paper)

Ingrid Midteide Løkken (Presenting Author); Radel James Gacumo (Co-Author); Janine Campbell (Co-Author); Natalia Kucirkova (Co-Author)

Session J 17 12:15–13:45 Location: HS 15.04

Balancing Multiple Criteria to Improve Validity and Fairness in Educational Assessment

Chair

Georg Krammer

Discussant

Benjamin Goecke

Organiser

Peter Edelsbrunner

Balancing Multiple Criteria to Improve Validity and Fairness in Educational Assessment (Symposium)

Balancing Cognitive Abilities for Fairer Selection in Gifted Programs (Single Paper) Benjamin Goecke (Presenting Author); Jessika Golle (Co-Author); Patrick Lösche (Co-Author); Hanna Beissert (Co-Author); Marcus Hasselhorn (Co-Author); Johanna Hartung (Co-Author); Ulrich Schroeders (Co-Author); Oliver Wilhelm (Co-Author); Ulrich Trautwein (Co-Author)

An Experimental Comparison of the Seven-Point- and Visual Analogue Scale in Intensive Assessment (Single Paper)

Peter Edelsbrunner (Presenting Author); Jonas Haslbeck (Co-Author)

Creating an Art Knowledge Test: Balancing Internal Consistency and Domain Coverage (Single Paper)

Diana Steger (Presenting Author); Selina Weiss (Co-Author); Oliver Wilhelm (Co-Author)

A Trade-Off in Children's Creativity: Balancing Originality and Task-Appropriateness (Single Paper)

Denis Dumas (Presenting Author); Selcuk Acar (Co-Author); Peter Organisciak (Co-Author); Sofiia Kagan (Co-Author); Melanie Carrera-Flores (Co-Author); Yoojoong Kim (Co-Author)

Session J 18 12:15-13:45 Location: HS 15.14

Career literacy for PhD graduates: Key issues in negotiating a future.

Chair Kirsi Pyhältö Discussant

Auli Toom

Towards an empirically informed career literacy framework (Single Paper)

lynn mcalpine (Presenting Author); Montserrat Castelló (Co-Author); Kirsi Pyhältö (Co-Author)

Redefining Identity/Career Development for PhD holders in Spain PhD Careers

Beyond Academia (Single Paper)

Marina García-Morante (Presenting Author); Montserrat Castelló (Co-Author); Anna Sala Bubaré (Co-Author); Crista Wise (Co-Author)

Career Pathways Beyond the PhD: Insights from French PhD Holders' Transitions

(Single Paper)

Alexandre Bran (Presenting Author); Clara Perroux (Co-Author)

Career literacy for PhD graduates: Key issues in negotiating a future. (Symposium)

The labour market for PhD graduates: the case of the United Kingdom (Single

Paper)

Sally Hancock (Presenting Author)

Session J 19 12:15-13:45 Location: HS 12.01

Cognitive processes in developing fluency with multiplication

Chair

Camilla Gilmore

Discussant

Julia Bahnmueller

Metacognition predicts arithmetic gains in primary school: Insights from a multiplication training (Single Paper)

Elien Bellon (Presenting Author); Wim Fias (Co-Author); Bert De Smedt (Co-Author)

Interference and inhibitory control in children's learning of multiplication facts (Single Paper)

Camilla Gilmore (Presenting Author); Natasha Guy (Co-Author); Charlotte Wilks (Co-Author); Joanne Eaves (Co-Author); Lucy Cragg (Co-Author)

Effects of ordered versus mixed practice on multiplication performance in sixthgraders (Single Paper)

David Müller (Co-Author); Jérôme Prado (Co-Author); Catherine Thevenot (Co-Author); Alice Boutros (Université de Lausanne)

Cognitive processes in developing fluency with multiplication (Symposium)

The relation between multiplication fluency, child's inhibition skill, and teacherrated attention (Single Paper)

Tuire Koponen (Presenting Author); Jarno Rautiainen (Co-Author)

### Session J 20 12:15–13:45 Location: HS 02.21

### Digital Assessing University Students Generic and Domain-Specific Critical (Online) Reasoning Skills

#### Chair

Patricia Alexander

#### Discussant

Tamara Van Gog

#### Organiser

Olga Zlatkin-Troitschanskaia

Digital Assessing University Students Generic and Domain-Specific Critical (Online) Reasoning Skills (Symposium)

Narrative-Reconstructive Case Study of Students' Critical Online Reasoning (Single Paper)

Carla Schelle (Presenting Author); Mita Banerjee (Co-Author); Olga Zlatkin-Troitschanskaia (Co-Author); Dominik Braunheim (Co-Author); Amina Touzos (Co-Author)

Scientific reasoning skills and epistemological beliefs of medical and physics students (Single Paper)

Anna Horrer (Presenting Author); Yavuz Dinc (Co-Author); Verena Ruf (Co-Author); Stefan Küchemann (Co-Author); Jochen Kuhn (Co-Author); Martin Fischer (Co-Author); Jan Zottmann (Co-Author); Alisa Stroganova (University Hospital)

Developing Domain-Specific Critical Online Reasoning Skills of First Year Economics' Students (Single Paper)

Marie-Theres Nagel (Presenting Author); Olga Zlatkin-Troitschanskaia (Co-Author); Lukas Trierweiler (Co-Author); Philine Drake (Co-Author); Johannes Hartig (Co-Author); William B. Walstad (Co-Author)

Evaluating Critical Information Usage among University Students in the Digital Age (Single Paper)

Jannick Illmann (Presenting Author); Frank Goldhammer (Co-Author); Carolin Hahnel (Co-Author); Johannes Hartig (Co-Author); Carmen Köhler (Co-Author); Marcus Schrickel (Co-Author); Philine Drake (German Institute for International Educational Research (DIPF))

### Session J 21 12:15–13:45 Location: HS 15.03

#### Emotions in Educational Settings: Developmental Trends and Antecedents

### Chair

Anna Hawrot

#### Discussant

Daniela Raccanello

Arousal and Traits Matter More than States: Situated Emotions in Technology-Enhanced Learning (Single Paper)

Anja Henke (Presenting Author); Jason Harley (Co-Author); Negar Matin (Co-Author); Rebecca Lazarides (Co-Author)

How achievement emotions in mathematics change during adolescence (Single Paper)

Michiko Sakaki (Presenting Author); Kou Murayama (Co-Author); Anne Christiane Frenzel (Co-Author); Thomas Goetz (Co-Author); Herb Marsh (Co-Author); Stephanie Lichtenfeld (Co-Author); Reinhard Pekrun (Co-Author)

Need Satisfaction and Frustration Profiles to Understand Student Teachers Emotions During Practicum (Single Paper)

Gerda Hagenauer (Presenting Author); Diana Raufelder (Co-Author); Mishela Ivanova (Co-Author); Andreas Bach (Co-Author); Doris Ittner (Co-Author); Clara Kuhn (Co-Author)

Emotions in Educational Settings: Developmental Trends and Antecedents (Symposium)

School enjoyment and intersecting disparities: A longitudinal study in Polish primary schools (Single Paper)

Anna Hawrot (Presenting Author); Alyssa Laureen Grecu (Co-Author)

Session J 22 12:15–13:45 Location: HS 11.02

### The Added Value of Process Measures in Game-Based Learning Research

Chair Kristian Kiili Discussant The Added Value of Process Measures in Game-Based Learning Research (Symposium)

Roger Azevedo **Organiser** Manuel Ninaus

Using Process Data to Understand Student Performance in Rational Number Line Game Tasks (Single Paper)

Xiaoshan Huang (Presenting Author); Koen Veermans (Co-Author); Sofia Ikonen (Co-Author); Antti Koskinen (Co-Author); Jake McMullen (Co-Author)

Leveraging Log-File Data to Examine the Effectiveness of Game Mechanics for Science Learning (Single Paper)

Daryn Dever (Presenting Author); Megan Wiedbusch (Co-Author); Cameron Marano (Co-Author); Annamaria Brosnihan (Co-Author); Kevin Smith (Co-Author); Milouni Patel (Co-Author); Tara Delegado (Co-Author); Roger Azevedo (Co-Author)

Physiological and Facial Expression Responses to Task Quitting in Collaborative Game-Based Learning (Single Paper)

Muhterem Dindar (Presenting Author); Kristian Kiili (Co-Author)

Tracing the influence of game elements on learning via physiological and behavioral process measures (Single Paper)

Stefan Huber (Presenting Author); Antero Lindstedt (Co-Author); Kristian Kiili (Co-Author); Manuel Ninaus (Co-Author)

Session J 23 12:15–13:45 Location: HS 02.01

#### The Process and the Effects of Teacher Professional Development Interventions

Chair

Elmar Souvignier

Discussant

Samuel Merk

Longitudinal changes in teachers' beliefs and behaviour when implementing reading innovations (Single Paper)

Elmar Souvignier (Presenting Author); Mareike Ehlert (Co-Author); Fien De Smedt (Co-Author); Hilde Van Keer (Co-Author)

Enhancing Collaborative Learning: The Impact of Regulation Support on Student Interactions (Single Paper)

Fien De Smedt (Presenting Author); Karen Putzeys (Co-Author); Bram De Wever (Co-Author)

Enhancing Teachers' Reading-Related Knowledge and Skills through Professional Development Programs (Single Paper)

Kristi Jakobson (Presenting Author); Anna-Liisa Jõgi (Tallinn University); Piret Soodla (University of Tallinn)

The Process and the Effects of Teacher Professional Development Interventions (Symposium)

Effects of providing teachers with two differently structured approaches of formative assessment (Single Paper)

Larissa Aust (Presenting Author); Jeanne-Celine Linker (Co-Author); Luise Eichholz (Co-Author); Jana Schiffer (Co-Author); Marcus Nührenbörger (Co-Author); Christoph Selter (Co-Author); Elmar Souvignier (Co-Author)

Session J 24 12:15–13:45 Location: HS 03.01

### Leveraging the trigger framework for examining self, co- and shared-regulation

Chair

Sanna Järvelä Discussant

Timothy Cleary

Designing MAI – metacognitive AI agent guided by the trigger regulation framework (Single Paper)

Márta Sobocinski (Presenting Author); Justin Edwards (Co-Author); Joni Lämsä (Co-Author); Anni-Sofia Roberts (Co-Author); Sanna Järvelä (Co-Author)

Leveraging the trigger framework to examine emotion regulation during a collaborative exam (Single Paper)

Mariel Miller (Co-Author); Maria Amoros Teijeiro (Co-Author); Jason Harley (Co-Author); Reinhard Pekrun (Co-Author); Allyson Hadwin (University of Victoria)

Experience sampling methods for examining challenges as triggers for self-regulated learning (Single Paper)

Ramin Rostampour (Presenting Author); Maria Amoros Teijeiro (Co-Author); Mariel Miller (Co-Author); Allyson Hadwin (University of Victoria)

Leveraging the trigger framework for examining self, co- and shared-regulation (Symposium)

Multimodal triangulation of verbal and non-verbal cues as triggers for regulation in collaboration (Single Paper)

Ridwan Whitehead (Presenting Author); Andy (Khanh Xuan) Nguyen (Co-Author); Sanna Järvelä (Co-Author)

Session J 25 12:15–13:45 Location: SZ 15.21

#### Preparation for future learning: What works when and why?

#### Discussant

Aljoscha Neubauer

Preparation for future learning: What works when and why? (Symposium)

Preparing Future Conceptual Learning: Content-Specific Long-Term Effects of Early Physics Education  $({\rm Single~Paper})$ 

Yannis Bähni (Co-Author); Brigitte Hänger (Co-Author); Elsbeth Stern (ETH Zurich); Ralph Schumacher (ETH Zurich)

Comparing Transfer Effects Across Instructional Methods: A Second-Order Meta-Analysis (Single Paper)

Michael Schneider (Presenting Author); Bianca Simonsmeier (Co-Author)

Adapting Instruction to Learners' Prior Knowledge: A Meta-Analysis of the Expertise Reversal Effect (Single Paper)

Garvin Brod (Presenting Author); Leonard Tetzlaff (Co-Author); Bianca Simonsmeier (Co-Author)

Learning to stop to improve the resolution of arithmetic word problem (Single Paper) Grégoire Borst (Presenting Author)

### Session J 26 12:15–13:45 Location: HS 15.12

## Moving the Field Forward: Pinpointing Features of Immersive Virtual Reality That Support Learning

#### Chair

Alyssa Lawson; Josef Buchner **Discussant** 

Miriam Mulders

A Comparison of Generative Activities in Virtual Reality: Re-experiencing or reflecting? (Single Paper)

Valdemar Stenberdt (Presenting Author); Guido Makransky (Co-Author)

Exploring Attentional Flow in IVR: Gaze-Based Process Mining to Analyze Coherence Formation (Single Paper)

Christian Hartmann (Presenting Author); Christian Kosel (Co-Author); Maria Bannert (Co-Author)

Do different interaction modes impact learning in immersive virtual reality? (Single Paper)

Josef Buchner (Presenting Author); David Baberowski (Co-Author); Thiemo Leonhardt (Co-Author); Nadine Bergner (Co-Author)

Integrating Immersive Virtual Reality into Learning (Single Paper)

Alyssa Lawson (Co-Author); Cynthia Y. Delgado (Co-Author); Richard Mayer (Co-Author); Amedee Martella (University of Georgia)

Moving the Field Forward: Pinpointing Features of Immersive Virtual Reality That Support Learning (Symposium)

### Session K 01 14:00–15:30 Location: SR 15.43

### Potential and Challeges of Digital Tools, Activities and Environments

#### Chair

Xiao-Yin Chen

Concept Maps in Online Courses: Who Uses Them and How? (Poster Presentation) Maria Klose (Presenting Author); Daniel Bengs (Leibniz Institute for Research and Information in Education (DIPF)); Ilka Wolter (Co-Author); Cordula Artelt (Co-Author)

Collaborative learning as a key strategy for self-regulated learning in a collectivist culture (Poster Presentation)

Pablo E. Torres (Presenting Author)

How Do Motivation and Self-Regulation Shape E-learning Satisfaction? (Poster Presentation)

Mohammadreza Farrokhnia (Presenting Author); Roshan Ahmadi (Co-Author); Pantelis M. Papadopoulos (Co-Author); Omid Noroozi (Co-Author); Abbas Taghizade (Farhangian University)

Learning for Digital Detox: Exploring Instagram Use, Social Comparison, and Fear of Missing out (Poster Presentation)

Hermann Astleitner (Presenting Author); Michelle Rosenthal (Co-Author)

Initiation of digital learning activities: The role of university teachers' knowledge and attitudes (Poster Presentation)

Anne Lohr (Presenting Author); Amadeus J. Pickal (Co-Author); Elisabeth Bauer (Co-Author); Frank Fischer (Co-Author); Michael Sailer (Co-Author)

How Pandemic-Related Restrictions Affected Student Engagement: Comparing Lecturing Approaches (Poster Presentation)

David Speed (Presenting Author); Jonathan Wilbiks (Co-Author)

Session K 02 14:00–15:30 Location: SR 15.42

### Navigating transitions and challengs in academic and higher education

#### Chair

Sierra Outerbridge

Engagement in transition to higher education: enhancing and impeding factors. A systematic review (Poster Presentation)

Heidi Hyytinen (Presenting Author); Katri Kleemola (Co-Author); Liyuan E (Co-Author); Tarja Tuononen (Co-Author); Auli Toom (Co-Author)

Challenges at the Interface of Computer Science and Mathematical Modeling (Poster Presentation)

Michael Fischer (Presenting Author)

Measuring the effectiveness of research ethics training – not a simple matter! (Poster Presentation)

Anu Tammeleht (Presenting Author); Erika Löfström (Co-Author)

Post-PhD processes: an exploratory study on transitions after doctoral studies (Poster Presentation)

Patrícia Alves (Presenting Author); Rosa Proença (Co-Author); Mário Dinis-Ribeiro (Co-Author); Rui Henrique (Co-Author); Isabel Menezes (Co-Author)

The innovative teamwork compass - Conditions and learning processes that advance innovation in teams (Poster Presentation)

Idwer Doosje (Presenting Author); Simon Beausaert (Co-Author); mieke koeslag-kreunen (Co-Author); Kirstin van Lommel (Co-Author)

Challenges in Challenge-Based Learning: Perspectives from Key Stakeholders (Poster Presentation)

Despoina Georgiou (Presenting Author); Silvia Gallagher (Co-Author); Kaja Chmielewska (Co-Author)

Session K 03 14:00–15:30 Location: SR 15.45

### Learning Strategies, Materials, and Communication

#### Chair

Anne-Elina Salo

Exploiting epistemic confusion to improve learning of first aid procedures with fire-fighters (Poster Presentation)

NATHALIE HUET (Co-Author); Paul Mirobolant (Co-Author); Alex Mandirac (University of Toulouse); Amaël Arguel (University of Toulouse)

Teaching (Un)Interested Learners: How Existing Interest Shapes the Effect of Emotional Design (Poster Presentation)

Charlotte Vössing (Presenting Author); Alexander Renkl (Co-Author); Tino Endres (Co-Author)

Advantages of interactive multi-touch devices compared to linear posters in exhibition contexts (Poster Presentation)

Laura Peiffer-Siebert (Presenting Author); Birgit Brucker (Co-Author); Amely Wimmer (Co-Author); Peter Gerjets (Co-Author)

Meta-Strategic Learning of Structure Strategies in Reading Comprehension of Expository Texts (Poster Presentation)

Meni Yeari (Presenting Author); Tal Lavi (Co-Author); Atalia Rasouly-Balfer (Co-Author); Liron Shalev (Co-Author)

Acquisition of Japanese Hiragana Letters: Does Interleaved Practice help? (Poster Presentation)

Marina Klimovich (Presenting Author); Veit Kubik (Co-Author); Tobias Richter (Co-Author)

Fostering preschoolers' problem-solving with gears through gestural and verbal modeling (Poster Presentation)

Timo Reuter (Presenting Author); Jonas Schäfer (Co-Author); Miriam Leuchter (Co-Author)

Session K 04 14:00–15:30 Location: SR 15.48

#### Students' Learning, Achievement and Assessment

#### Chair

Benjamin Heinitz

Self-Efficacy as a future skill in higher education and beyond? Definitions and assessment (Poster Presentation)

Pascale Stephanie Petri (Presenting Author); Manuela Benick (Co-Author)

How Achievement-Related-Emotions, and Behaviour Differ in Appraisals of High-Stake-Testing (Poster Presentation)

Tahrim Hussain (Presenting Author); David Putwain (Co-Author)

Unmasking grading bias: A regression residual-based tool for visualizing grade discrepancy (Poster Presentation)

Rasa Erentaitė (Co-Author); Berita Simonaitienė (Co-Author); Vaidas Morkevičius (Co-Author); Giedrius Žvaliauskas (Co-Author); Rimantas Vosylis (Kaunas University of Technology)

Self-regulated learning strategies and language proficiency among Vietnamese EFL students (Poster Presentation)

Minh Dong (Presenting Author); Anita Habók (Co-Author)

Moderating Factors in Online Course Success: Universal Design for Learning and Academic Level (Poster Presentation)

Irit Sasson (Presenting Author); Itamar Yehuda (Co-Author)

Session K 05 14:00–15:30 Location: SR 15.44

#### Students' Perception, Reflection and Learning

#### Chair

Emma Burns

Measuring learning outcomes in Education Outside the Classroom: Scuola Diffusa and its impact (Poster Presentation)

Laura Landi (Presenting Author); Chiara Bertolini (Co-Author)

Triangulating TPACK: An epistemic network analysis of lesson plans (Poster Presentation)

Eliana Brianza (Presenting Author); Mirjam Schmid (Co-Author); Jo Tondeur (Co-Author); Dominik Petko (Co-Author)

Scaffolding students' uncertainty management using concept maps and reflection prompts (Poster Presentation)

Chandan Dasgupta (Presenting Author); Jenny Ries (Co-Author); Alieke van Dijk (University of Twente)

Not just fun, but learning: Designing immersive gamification for formal English language education (Poster Presentation)

Shen Qiao (Presenting Author); Siu-sze Yeung (Co-Author); Samuel Chu (Co-Author)

Students' Perceptions of Community of Inquiry in Hybrid Blended Learning (Poster Presentation)

Jun Oshima (Presenting Author); Ritsuko Oshima (Co-Author)

Japanese EFL University Students' Self-Reflective Perceptions on Language Learning Competences (Poster Presentation)

Brian Wojtowicz (Presenting Author); Michael Wilkins (Presenting Author)

Session K 06 14:00–15:30 Location: SR 03.01

#### New Tools for Learning and Testing

Dyslexia: Showcasing the Dysmate Tool for Detection and Intervention (Demo Session)

Trude Nergård-Nilssen (Presenting Author); Andrea Anderson (Co-Author); Marie-Christine Vierbuchen (Co-Author); Florian Koch (Co-Author); Camilla Nilvius (Co-Author); Christian Waldmann (Co-Author); Linda Sandström (Co-Author); Rebecca Schumacher (University of Potsdam)

From Learners to Leaders: DigiCoaches, the SAID Project and its Materials (Demo Session)

Valerie Fredericks (Presenting Author); Susanne Seifert (Presenting Author); Stella Schatz (Co-Author); Anneliese Franz (Co-Author)

Game-Based early detection of colour blindness in children: educational impacts and new approaches. (Demo Session)

Liliana Silva (Presenting Author); Alessandro Rizzi (Co-Author); Carlo Alberto Iocco (Co-Author); Daniele Aurelio (Co-Author)

Playful Testing of Executive Functions (Demo Session)

Ricardo Rosas Diaz (Presenting Author); Victoria Espinoza (Presenting Author); Florian Schmitz (Presenting Author)

### Session K 07 14:00–15:30 Location: HS 05.12

#### **Educator and Teacher Practices and Methods**

#### Chair

Koen Aesaert

Kalulu: A Free, Fun, and Research-Backed way to learn how to read (Demo Session) Melina Vladisauskas (Presenting Author); Cassandra Potier Watkins (Co-Author); Katerina Lukasova (Co-Author); Stanislas Dehaene (Co-Author); Marie Lubineau (Co-Author); Juan Valle Lisboa (Co-Author); Camilo Olalla (Co-Author); Cristiane Sato (Co-Author)

Simulated Practice in Teacher Education: A New Arena for Professionalization (SIMPROF) (Demo Session)

Morten Oddvik (Presenting Author); Magnus Henrik Sandberg (Presenting Author); Agnete Bueie (Co-Author); Charlotte Beal (Co-Author); Jo Inge Johansen Frøytlog (Co-Author); Toril Aagaard (Co-Author)

Observing Educators' Facilitation of Infants' Exploratory Play in Child Daycare (Demo Session)

Mariska Venema (Presenting Author); Ora Oudgenoeg-Paz (Co-Author); Paul Leseman (Co-Author); Sui Lin Goei (Co-Author)

Session K 08 14:00–15:30 Location: SZ 15.21

### School-to-work-transition of students with special education needs

#### Chair

Carmen Zurbriggen; Markus Neuenschwander

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Discussant

Kati Vasalampi

 ${\bf School\text{-}to\text{-}work\text{-}transition\ of\ students\ with\ special\ education\ needs\ ({\bf Symposium})}$ 

Transition to vocational rehabilitation and alternatives for young school leavers with disabilities (Single Paper)

Nancy Reims (Presenting Author); Leonie Wicht (Co-Author)

Well-Being in Early Adulthood – Long-Term Consequences of Inclusive vs. Segregated Education (Single Paper)

Lena Nusser (Presenting Author); Jonna Blank (Co-Author); Laura Menze (Co-Author)

School-to-work transition of at-risk students: School type, behavior, teacher and parent support (Single Paper)

Markus Neuenschwander (Presenting Author); Ariana Garrote (Co-Author); Christoph Müller (Co-Author)

Mapping enabling and disabling factors in school-to-work transitions of youth with disabilities.  $(Single\ Paper)$ 

Kevin Simoes Loureiro (Presenting Author)

Session K 09 14:00–15:30 Location: HS 25.11

### Advancing multilingual development: effective teaching for diverse learners

Chair

Hilde Van Keer

Discussant

MARJA-KRISTIINA LERKKA-

NEN

Organiser

Joke Torbeyns

Advancing multilingual development: effective teaching for diverse learners (Symposium)

Math talk in multilingual families: effects on young children's emergent mathematical ability (Single Paper)

Paul Leseman (Presenting Author); Pauline Slot (Co-Author)

Emergent bilinguals' L2 vocabulary acquisition through interactive book reading (Single Paper)

Eline Decraene (Presenting Author); Maribel Montero Perez (Co-Author); Hilde Van Keer (Co-Author)

Characterizing teaching-learning routines in multilingual mathematics instructions (Single Paper)

Lianne Stolte (Presenting Author); Arthur Bakker (Co-Author); Jantien Smit (Co-Author); Elma Blom (Co-Author)

A multilingual preschooler's school belonging: The role of translanguaging pedagogy  $({\rm Single~Paper})$ 

Gabrijela Aleksic (Presenting Author); Ofelia Garcia (Co-Author)

Session K 10 14:00–15:30 Location: HS 15.02

Academic buoyancy: What it is, how it develops, what effects it has, and how these can be explained

Chair

David Putwain

Discussant

Andrew Martin

Organiser

Joost Jansen in de Wal

Academic buoyancy: What it is, how it develops, what effects it has, and how these can be explained (Symposium)

The relationship between undergraduate students' weekly academic buoyancy and test performance (Single Paper)

Thijmen Van Alphen (Presenting Author); Joost Jansen in de Wal (Co-Author); David Putwain (Liverpool John Moores University)

Revisiting the Relation Between Academic Buoyancy and Coping: A Network Analysis (Single Paper)

David Putwain (Presenting Author); Tahrim Hussain (Co-Author); Reinhard Pekrun (Co-Author); Martin Daumiller (LMU Munich)

Meta-Analysis on Gender Differences in Academic Buoyancy (Single Paper)

Oscar Yau (Presenting Author); Andrew Martin (Co-Author); Paul Ginns (Co-Author); Rebecca Collie (Co-Author)

The changes in academic buoyancy during transition from primary to lower secondary school (Single Paper)

Anne Lakkavaara (Presenting Author); Katja Upadyaya (Co-Author); Katariina Salmela-Aro (Co-Author)

Session K 11 14:00–15:30 Location: HS 46.01

Cognitive and home-related predictors of individual differences in early numeracy development.

Discussant

Iro Xenidou-Dervou

Organiser

Bob Kapteijns

Longitudinal latent profiles of numeracy development across early primary school. (Single Paper)

Bob Kapteijns (Presenting Author); Marco van de Ven (Co-Author); Anne Hoogmoed (Co-Author); Evelyn Kroesbergen (Co-Author)

Education as a natural experiment: The effects of schooling on early mathematical abilities. (Single Paper)

Floor Vandecruys (Presenting Author); Maaike Vandermosten (Co-Author); Bert De Smedt (Co-Author)

Home Math Environment and Children's Arithmetic Fluency: A Longitudinal Familial Control Study (Single Paper)

Lotta Sieppi (Presenting Author); Daria Khanolainen (Co-Author); Minna Torppa (Co-Author); Jenni Salminen (Co-Author); Tuire Koponen (Co-Author); Eija Räikkönen (Co-Author)

The Unique Contribution of Working Memory and EF in Children's Calculation and Math Reasoning. (Single Paper)

Sandra Pellizzoni (Co-Author); Maria Chiara Passolunghi (Co-Author); Alessandro Cuder (University of Trieste)

Cognitive and home-related predictors of individual differences in early numeracy development. (Symposium)

Session K 12 14:00–15:30 Location: HS 15.14

Physiological lenses on professional learning: insights from multimodal studies

Chair

Katrien Cuyvers

Discussant

Maaike Endedijk

The Potential of Physiological Measures for Understanding Team Learning and Innovation (Single Paper)

Amber van Kampen (University of Twente); Marcella Hoogeboom (University of Twente)

Combining Nervous System and Experiential Measures to Study Learning Experience (Single Paper)

Minna Silvennoinen (Presenting Author); Tiina Parviainen (Co-Author)

Multimodal stress assessment: an overview of methodical applications (Single Paper) Tobias Kärner (Presenting Author)

Physiological lenses on professional learning: insights from multimodal studies (Symposium)

Understanding Nurses' Reflection-in-Action through Heart Rate Measurement. (Single Paper)

Birgit Van Biesbroeck (Presenting Author); Katrien Cuyvers (Co-Author)

Session K 13 14:00-15:30 Location: HS 05.01 Experimentierhörsaal

#### Views on Error and Failure in Different Cultural and Educational Contexts

Chair Maria Tulis Discussant

Susanne Narciss

Focusing on Failure: Supporting Professional Development, Reflection, Learning of Informal Educators (Single Paper)

Adam Maltese (Presenting Author); Lauren Penney (Co-Author); Kelli Paul (Co-Author); Alice Anderson (University of Pittsburgh); Amber Simpson (Binghamton University)

Promoting Error Climate in the Classroom: A Quasi-experimental Study with Secondary School Teachers (Single Paper)

Maria Cristina Matteucci (Presenting Author); Costanza Dini (Co-Author); Annalisa Soncini (Université Libre de Bruxelles)

Error Handling in Students with Internalizing and Externalizing Behavior Problems (Single Paper)

Viktoria Pöchmüller (Presenting Author)

Views on Error and Failure in Different Cultural and Educational Contexts (Invited Symposium)

What Do We Mean by Failure? A Systematic Review of Measuring Failure in Educational Contexts (Single Paper)

Cheng Pang (Presenting Author); Elizabeth Peterson (Co-Author); Kane Meissel (Co-Author); Jiali Lin (Co-Author)

Session K 14 14:00-15:30Location: HS 12.01

Professional learning and development in the digital age: Forms and implications of meta-work

Chair

Regina Mulder Discussant

Els Boshuizen Organiser

Monika Nerland

Professional learning and development in the digital age: Forms and implications of meta-work (Invited Symposium)

Meta-work as a scaffold for the continual transformation of work (Single Paper) Koula Charitonos (Presenting Author); Francisco Duran del Fierro (Presenting Author); Allison

Littlejohn (Co-Author)

Learning through metawork in digitalised healthcare: The case of monitoring patient falls (Single Paper)

Monika Nerland (Presenting Author); Asa Makitalo (Presenting Author)

The meaning of the relationships between new technologies, metawork, and professional development (Single Paper)

Vanessa Hämmerl (Presenting Author); Regina Mulder (Co-Author)

Unseen Burdens: The Meta-Work and Technostress Dilemma (Single Paper)

Pauliina Rikala (Presenting Author); Ville Heilala (Co-Author); Anne Karhapää (Co-Author);

Raija Hämäläinen (Co-Author)

Session K 15 14:00–15:30 Location: HS 15.06

Challenges and opportunities for theorizing and implementing inquiry-based learning

Chair

Christiana Varda; Tasos Hovardas; Tomi Jaakkola

Discussant

Peter Edelsbrunner

Leveraging Inquiry-Based Learning to Foster Personal Data Literacy Among Elementary School Students (Single Paper)

Eleni Kyza (Presenting Author); Andria Agesilaou (Co-Author)

Challenges and opportunities for theorizing and implementing inquiry-based learning (Invited Symposium)

Inquiry-Based Learning in Primary Education: Attitudes and Science Knowledge in Pre-Service Teachers (Single Paper)

Joep van der Graaf (Presenting Author); Noortje Janssen (Co-Author)

Experimental Inquiry-Based Activities as a Pathway to Early Scientific Literacy (Single Paper)

MIA ČOVIĆ (Presenting Author)

 $\begin{array}{c} \textbf{Combining Real Experiments with Virtual Reality Experiments} - \textbf{Which Sequence} \\ \textbf{is Preferable?} \ (\textbf{Single Paper}) \end{array}$ 

Salome Flegr (Presenting Author); Jochen Kuhn (Co-Author)

Presidential Dinner

19:30-NA

Presidential Dinner

Session K 16 14:00–15:30 Location: HS 01.22

Driving Research on Achievement Emotions Forward: Insights From Primary School to University

Chair

Daniela Raccanello; Giada Vicentini

Discussant

Reinhard Pekrun

Driving Research on Achievement Emotions Forward: Insights From Primary School to University (Invited Symposium)

Dynamic Network Modelling Associations Among Emotions and Their Regulation During Exam Preparation (Single Paper)

Martin Daumiller (Presenting Author)

Primary and Lower Secondary School Students' Achievement Emotions Associated With Teachers' Feedback (Single Paper)

Daniela Raccanello (Presenting Author)

Are We Bored or Just a Tad Happy? Profiles of Primary School Students' Academic Emotions About Math (Single Paper)

Jelena Radišić (Presenting Author); Francisco Peixoto (Co-Author); Teresa Caetano (Co-Author); Lourdes Mata (Co-Author); Mafalda Campos (Co-Author); Ksenija Krstic (Co-Author)

Primary Students' Emotions in Literacy Acquisition: The AEQW-ES and a Service-Learning Intervention (Single Paper)

Juliane Schlesier (Presenting Author); Simon Meyer (Co-Author); Stephanie Lichtenfeld (Co-Author); Tanja Jungmann (Co-Author)

Session K 17 14:00-15:30 Location: HS 15.13

Mapping the European Educational Research Field: Thematical Trends and Clusters over 30 Years

Chair

Marit Honerod Hoveid

Mapping the European Educational Research Field: Thematical Trends and Clusters over 30 Years (Invited Symposium)

Interactive and Visual Exploration of Research Topics, EERA Networks and Authors of ECER conferences (Single Paper)

Alexander Christ (German Institute for International Educational Research (DIPF))

Empowering the European Educational Research Community (Single Paper)

Christoph Schindler (Presenting Author); Alexander Christ (German Institute for International Educational Research (DIPF))

Uncovering Trends in Educational Research: A Surprising Decline in Focus on Learning (Single Paper)

Lucian Ciolan (Presenting Author)

Mapping European Educational Research: Insights from Topic Modelling of ECER

Abstracts (Single Paper)

Maarten Deleye (Presenting Author)

Session K 18 14:00-15:30 Location: HS 44.11

Critical thinking in future education: from psychological mechanisms to practical interventions

Chair

Roland H. Grabner; Stephan Vo-

Discussant

Panayiota Kendeou

Critical thinking in future education: from psychological mechanisms to practical

interventions (Invited Symposium)

Learning as an epistemic activity (Single Paper)

Tobias Richter (Presenting Author); Simon Tiffin-Richards (Co-Author)

Building Critical Thinking Skills for a Digital World: The role of informed trust (Single Paper)

Marc Stadtler (Presenting Author); Philipp Marten (Co-Author)

Willing to think: the contribution of dispositions on critical thinking in learning tasks (Single Paper)

Christian Tarchi (Presenting Author)

Students' online credibility evaluation skills: What do we know, and how do we

know it? (Single Paper)

Carita Kiili (Presenting Author)

Session K 19 14:00–15:30 Location: HS 01.14

#### New Tools for Promoting Learning and Affect

#### Chair Yan WANG

Enhancing Emotion Regulation in Online Group Learning with LLM-based Pedagogical Agents (Demo Session)

Erfan Jalili Jalal (Presenting Author); Maartje Henderikx (Co-Author); Linda van Zutphen (Co-Author); Roland Klemke (Co-Author); Karel Kreijns (Co-Author)

Using Longitudinal Video Diaries to Capture Rich, Comprehensive Qualitative Data (Demo Session)

Zhihan Wu (Presenting Author); Dely Elliot (Co-Author); Kara Makara (Co-Author)

"Avastusrada" - A Digital Outdoor Learning Tool for Shaping Future orientated Minds and Brains (Demo Session)

Elina Malleus-Kotsegarov (Presenting Author); Arja Kaasinen (Presenting Author); Silvia Grabner (Presenting Author); Anttoni Kervinen (Co-Author); David Grabner (Co-Author); Grete Arro (Co-Author); Jaanus Terasmaa (Co-Author); Esta Kaal (Co-Author); Hannu Salmi (Co-Author); Arko Olesk (Co-Author); Mihkel Kangur (Co-Author); Alexandros Pantazis (Ellinogermaniki Agogi)

Session K 20 14:00–15:30 Location: LS 15.03

### Emotions, Emotional Intelligence and Real-Life Tasks

#### Speaker

Emmanuel Manalo

From classroom to reality: Enhancing students' skills with real-life linear function tasks (Roundtable)

Triinu Kilp-Kabel (Presenting Author); Hardi Sigus (Co-Author); Kaja Mädamürk (Tallinn University)

Trait Emotional Intelligence as a Mediator Between Growth Mindset and Agentic Engagement (Roundtable)

Yousef Alardhi (Presenting Author); Nasser Hasan (Co-Author)

Effects of Problem-Solving before Instruction (PS-I) on Learning: The Mediation Role of Emotions (Roundtable)

Trinidad Garcia (Presenting Author); Eduardo González-Cabañes (Co-Author); Héctor Martínez (Co-Author); Celestino Rodríguez (Co-Author)

Session K 21 14:00–15:30 Location: SR 15.13

### Challenges and Potentials in Teaching

#### Chair

BOBBY HOFFMAN

The potential of integrating Computational Thinking into school subjects (Roundtable)

Sharon Calor (Presenting Author); Marjolein van Dekken (Co-Author); Martijn Koek (Co-Author); Marco Kragten (Co-Author); Dorrith Pennink (Co-Author); Josefien Sweep (Co-Author); Anders Bouwer (Co-Author); Bert Bredeweg (Co-Author); Albert Logtenberg (Amsterdam University of Applied Sciences)

Enhancing Language-Oriented Content Teaching in Education: Engaging Teachers in Specialized PD  $({\rm Roundtable})$ 

Lieke Holdinga (Presenting Author); J.P. van Drie (Co-Author)

What Are We Taking for Granted? Questioning Core Assumptions of Dialogic Teaching (Roundtable)

Michele Flammia (Presenting Author); Alina Reznitskaya (Co-Author)

Session K 22 14:00–15:30 Location: HS 15.11

#### Promoting Digital Text Comprehension and Beyond

#### Chair

Anke Wischgoll

Examining Teacher Expertise: A Laboratory Study comparing Experienced and Inexperienced Teachers (Single Paper)

Mandy Klatt (Presenting Author); Anne Deiglmayr (Co-Author); Gregor Kachel (Co-Author); Christin Lotz (Co-Author)

Which Refutation Medium to Use: Video or Text? (Single Paper)

Marie-Christin Krebs (Presenting Author); Anna-Sophia Dersch (Co-Author); Alexander Eitel (Co-Author)

Reception of digital texts in university teaching - effects on text comprehension (Single Paper)

Gerd Hoffmann (Presenting Author)

Enhancing Digital Reading Comprehension: Insights from Eye Tracking and EEG (Single Paper)

Clara Soberats (Co-Author); Marta Vergara Martinez (Co-Author); Ladislao Salmerón (Co-Author); Mario Romero (University of Valencia / Interdisciplinary Research Structure for Reading Research (ERI Lectura))

Session K 23 14:00–15:30 Location: HS 01.15

### Assessment, self-evaluation and feedback

#### Chair

Daniel Then

Novel Approaches To Self-Evaluation Bias Effects: A Cautionary Note Against Quadratic RSA (Single Paper)

Fernando NUNEZ-REGUEIRO (Presenting Author); Ludivine Jamain (Co-Author); Pascal Pansu (Co-Author); Thérèse Bouffard (Co-Author)

Impact of Complexity and Digital Game-Based Assessments on Primary Students' Number Line Performance (Single Paper)

Frank Reinhold (Presenting Author); Dinah Reuter (Co-Author); Manuel Ninaus (Co-Author); Steve Nebel (Co-Author); Kristian Kiili (Co-Author)

Feedback as a predictor of primary school students' motivation and mathematical competence (Single Paper)

Nils Finke (Presenting Author); Frank Hellmich (Co-Author); Margarita Knickenberg (Paderborn University)

Measurability and Performance: Reading comprehension as an unintentional segregational tool  $({\rm Single~Paper})$ 

Sylvi Vigmo (Presenting Author); Maria Bäcke (Presenting Author); Susanne Smithberger (Co-Author)

Session K 24 14:00–15:30 Location: HS 11.02

### Beliefs and Learning Skills in Different Domains

Chair

Monika Merket

Literacy in multilingual pupils: Distinguishing dyslexia from (developing) language skills (Single Paper)

Rebecca Schumacher (Presenting Author); Florian Koch (Co-Author); Andrea Anderson (Co-Author); Marie-Christine Vierbuchen (Co-Author); Trude Nergård-Nilssen (Co-Author)

Developing Self-Regulated Learning skills through embedded online activities. (Single Paper)

Helena Pacitti (Presenting Author); Jamie Dracup (Co-Author); Jason Lodge (Co-Author); Jenny Richmond (Co-Author)

The challenges of learning conceptual and procedural knowledge of algebra in 8th grade (Single Paper)

Liina Malva (Presenting Author); Mart Laanpere (Co-Author); Danial Hooshyar (Co-Author)

Background differences in a cross-sectional study of epistemological science beliefs (Single Paper)

Sara Pimenta (Presenting Author); Edit Katalin Molnár (Co-Author)

Session K 25 14:00–15:30 Location: HS 02.21

### Human-AI Collaboration in Teaching and Learning

 $\operatorname{Chair}$ 

Nikol Rummel

Discussant

Cindy Hmelo-Silver

Organiser

Sanna Järvelä

Do Learners Detect Different Revision Occasions in Texts Labeled as Peer-written and AI-generated? (Single Paper)

Anna Radtke (Presenting Author); Qian Ruan (Co-Author); Iryna Gurevych (Co-Author); Nikol Rummel (Co-Author)

Augmenting Teachers' Capabilities to Provide Feedback with AI-powered Multimodal Learning Analytics (Single Paper)

Dragan Gasevic (Presenting Author); Vanessa Echeverria (Co-Author); Linxuan Zhao (Co-Author); Riordan Alfredo (Co-Author); Roberto Martinez-Maldonado (Co-Author)

How do human-AI interactions facilitate group engagement in SSRL in a collaborative inquiry task? (Single Paper)

Joni Lämsä (Presenting Author); Justin Edwards (Co-Author); Márta Sobocinski (Co-Author); Anni-Sofia Roberts (Co-Author); Ridwan Whitehead (Co-Author); Sanna Järvelä (Co-Author)

Does Fallible AI-Feedback Hinder Learning? Experimental Evidence from Lower Secondary Education (Single Paper)

Marlene Steinbach (Presenting Author); Johanna Fleckenstein (Co-Author); Livia Kuklick (Co-Author); Jennifer Mayer (Co-Author)

Human-AI Collaboration in Teaching and Learning (Symposium)

Session K 26 14:00–15:30 Location: HS 15.12

### Assessment and support of student SRL: Investigating the role of the teacher and technology

#### Chair

Anouschka van Leeuwen

Discussant Jeff Greene Organiser

Melis Dülger

Using Mobile-App Trace Data to Examine Complexity of Self-Regulated Learning and Student Engagement (Single Paper)

Jacqueline Wong (Presenting Author); Mohammad Khalil (Co-Author); Vsevolod Suschevskiy (Co-Author); Martine Baars (Co-Author); Fred Paas (Co-Author); Bjorn de Koning (Erasmus University Rotterdam)

Teacher feedback practice while using a teacher dashboard (Single Paper)

Sebastian Strauß (Presenting Author); Lena Borgards (Co-Author); Onur Karademir (Co-Author); Daniele Di Mitri (Co-Author); Marcus Kubsch (Co-Author); Markus Brobeil (Co-Author); Adrian Grimm (Co-Author); Sebastian Gombert (Co-Author); Knutt Neumann (Co-Author); Maren Scheffel (Co-Author); Hendrik Drachsler (Open University of the Netherlands); Nikol Rummel (Ruhr University Bochum)

Teachers' plans for direct strategy instruction: The influence of mirroring and advising dashboards  $({\rm Single~Paper})$ 

Melis Dülger (Presenting Author); Anouschka van Leeuwen (Co-Author); Jeroen Janssen (Co-Author); Liesbeth Kester (Co-Author)

Teachers' assessment of student SRL – is it biased by student characteristics? (Single Paper)

Sabrina Nadja Brunner (Presenting Author); Yves Karlen (Co-Author)

Assessment and support of student SRL: Investigating the role of the teacher and technology (Symposium)

Session K 27 14:00–15:30 Location: SR 15.32

#### Development and Learning in Children

#### Chair

Florencia Gomez Zaccarelli

The role of exploration in the relation between walking and selective attention development (Roundtable)

Ora Oudgenoeg-Paz (Presenting Author)

Shaping Language Skills: Consecutive Peer Effects from Preschool to Primary School (Roundtable)

Franziska Hürlimann (Presenting Author); Daniel Schmerse (Co-Author); Oliver Lüdtke (Leibniz Institute for Science and Mathematics Education (IPN))

How Innovation Emerges in Young Children? A Multi-Perspective Investigation  $({\tt Roundtable})$ 

Jiajun Guo (Presenting Author)

Coffee Break 15:30–16:00

Coffee Break

Session L 01 16:00–17:30 Location: SR 15.48

#### Learning in Different Digital Environments

#### Chair

Ines Zeitlhofer

The Role of Learning Activities and Social Presence in Synchronous Hybrid Classrooms (Poster Presentation)

Marlene Wagner (Presenting Author); Gerti Pishtari (Co-Author); Tobias Ley (Co-Author)

Building Electronic Measuring Instruments to Understand Sensor Functioning (Poster Presentation)

David Pellerin (Presenting Author)

AR in Cardiac Education: Assessing Learning and User Experience (Poster Presentation)

Ania Majewska (Presenting Author); Brayden Smith (Co-Author)

Socioeconomic Status and Digital Competence: Meta-analytic Insights from PISA 2022 in 80 Countries (Poster Presentation)

Maren Müller (Presenting Author); Tamara Kastorff (Co-Author); Samuel Greiff (Co-Author)

Examining the impact of badges and leaderboards on students' English interest and performance (Poster Presentation)

Chunqi Li (Presenting Author); Alex Shum (Co-Author); Lishi Liang (Co-Author); Zhixing Guo (Co-Author); Luke Fryer (The University of Hong Kong)

Does Personalised Learning Influence Students' Self-Evaluation in Digital Learning Environments? (Poster Presentation)

Ine Windey (Presenting Author); Sameh Said-Metwalyt (Co-Author); Stefanie Vanbecelaere (Co-Author)

Session L 02 16:00–17:30 Location: SR 15.44

#### Addressing challenges and innovations in education

#### Chair

Maria Zenios

Impact of on-screen reading on students with attention deficit disorder and students with autism (Poster Presentation)

Pablo Delgado (Presenting Author); Paula Barea-Arroyo (Co-Author); Gema Erena-Guardia (Co-Author); Vanessa Fernández-Torres (Co-Author); Joaquín Ibáñez-Alfonso (Co-Author); Martina Micai (Co-Author); F. Javier Moreno-Pérez (Co-Author); Miriam Rivero-Contreras (Co-Author); David Saldaña (Co-Author); Adrián Solís-Campos (Co-Author); Isabel R. Rodríguez-Ortiz (Co-Author)

What Do Students Want in a Study Strategy Intervention? (Poster Presentation) Jonathan Brazil (Presenting Author); Louise Ainscough (Co-Author); Jason Lodge (The University of Queensland)

Mathematics Anxiety in underrepresented secondary school children in the UK (Poster Presentation)

Abigail Agyemang (Centre for Neuroscience in Education)

"Integrating Startups into Germany's Dual Vocational Training System: Opportunities and Challenges" (Poster Presentation)

Thomas Rinke (Presenting Author); Miriam Toepper (Co-Author); Olga Troitschanskaia (Co-Author); Katharina Depré (Co-Author)

Doctoral Stress among Different Cultural Groups: A Creative Qualitative Investigation in Scotland. (Poster Presentation)

Karen Gordon (Presenting Author)

Bridging the Gap: Strategic Integration of Generative AI in Higher Education Practice (Poster Presentation)

Maria Misiutin (Presenting Author); Judit Martínez Moreno (Co-Author); Barbara Getto (Co-Author)

Training in digital assessment for faculty in higher education - A Design based Research approach (Poster Presentation)

Bernadette Dilger (Presenting Author); Eliane Troxler (Co-Author)

Session L 03 16:00–17:30 Location: HS 15.13

# Reading, Writing and Literacy in the Digital Age

# Chair

Siyu Zhu

Generative AI chatbots as dialogue partners and shared artefacts in EFL classrooms (Single Paper)

Fredrik Mørk Røkenes (Presenting Author); Øystein Gilje (Co-Author); Nina Eriksdatter (Co-Author); Martin Haldorsen (Co-Author); Kristian Holm (Co-Author)

Effects of three teaching online activities on students' skills to evaluate sources in videos (Single Paper)

Carine LAFON (Presenting Author); Brivael Hémon (Co-Author); Kévin DE CHECCHI (Co-Author); Bastien Trémolière (Co-Author); Franck Amadieu (Co-Author); Amaël Arguel (University of Toulouse)

Online Financial Fraud Information Literacy: LLM-Based Tool to Analyze Extensive Think-Aloud Data (Single Paper)

Hayden Mueller (Presenting Author); Alexandru Dima (Co-Author); Mihai Dascalu (Co-Author); Nicolae Nistor (Co-Author)

Reading and writing conceptions, self-efficacy beliefs, and academic achievement across disciplines (Single Paper)

Federico navarro (Presenting Author); Gabriela Gómez (Co-Author); Ruth Villalon (Co-Author)

Session L 04 16:00–17:30 Location: SR 15.42

#### Learning, Assessment, School Wellbeing and Achievement

#### Chair

Jessica Schulz

Understanding the relations between school well-being and academic achievement (Poster Presentation)

Margot Rémeau (Presenting Author); Gaël Raffy (Co-Author); Grégoire Borst (Co-Author)

Teacher Strategies for Addressing Unfinished Learning in K-8 Math Classrooms (Poster Presentation)

Madeleine Kingan (Presenting Author)

Schools' practices in dealing with the results of comparative tests (Poster Presentation)

Ilona Weyrauch (Presenting Author); Franziska Wick (Co-Author); Michael Zimmer-Müller (Co-Author); Ingmar Hosenfeld (Co-Author); Josef Strasser (Co-Author)

Can language proficiency at the end of secondary education predict higher education achievement? (Poster Presentation)

Jordi Heeren (Presenting Author); Lieve De Wachter (Co-Author); Goedele Vandommele (Co-Author); Elke Peters (Co-Author)

Are textbooks failing to address what PISA assesses?! Insights from science textbooks analysis (Poster Presentation)

Arlinda Bytyqi-Damoni (Co-Author); Zeqir Veselaj (Co-Author); Heike Wendt (Co-Author); Albulena Metaj-Macula (University of Prishtina)

**Development of 6 - to 17-year-old students' inductive reasoning** (Poster Presentation) Gyöngyvér Molnár (Presenting Author)

A Psychometric Evaluation of the CCTt Assessment for K-12 Students (Poster Presentation)

Session L 05 16:00–17:30 Location: SR 15.43

#### Innovations for Quality Instruction in Schools

#### Chair

Ying CHEN

Evaluating PCTOs in Italian Schools: Empowering Student Growth and Career Aspirations (Poster Presentation)

Valentina Pagani (Presenting Author); Irene Stanzione (Co-Author); Elisa Truffelli (Co-Author); Sara Germani (Co-Author); Martina Rossi (Co-Author)

Student-centred learning in innovative learning environments (Part II): Teachers' experiences (Poster Presentation)

Annika Wiklund-Engblom (Presenting Author); Maria Lindfors (Co-Author); Peter Bergström (Co-Author)

Knowing what to say and how to improve: Realizing EFL students' potential for global engagement (Poster Presentation)

Emmanuel Manalo (Presenting Author); Yu-Jr Lan (Presenting Author); Yukari Abe (Presenting Author); Mai Sawada (Co-Author); Etsuko Tanaka (Co-Author); Takeshi Sugimoto (Co-Author); Nozomi Ogishima (Co-Author)

Development and validation of a teacher collaboration design tool (Poster Presentation)

Benjamin Waldejer (Presenting Author)

What has changed? A new Normal with changing boundaries in Italian multicultural Secondary Schools (Poster Presentation)

HELGA BALLARDINI (Presenting Author)

Session L 06 16:00–17:30 Location: HS 02.11

## Professionalising Early Childhood Education: Shaping Education and Securing the Future

Chair

Eva Pölzl-Stefanec

Discussant

Thomas Moser

Organiser

Anna Libiseller; Claudia Geißler; Claudia Schomaker; Ingunn Størksen; Jasmin Bempreiksz-Luthardt Professionalising Early Childhood Education: Shaping Education and Securing the Future (Symposium)

Safe Space Kindergarten? A Study on Institutional Child Protection as Part of Professionalism (Single Paper)

Jasmin Bempreiksz-Luthardt (Presenting Author); Dennis Epping (Co-Author)

Designing professional-child interactions adaptively - Approaches to a construct (Single Paper)

Claudia Schomaker (Presenting Author)

Individual feedback and coaching as a way of professionalizing ECEC teachers? (Single Paper)

Claudia Geißler (Presenting Author); Anna Libiseller (Presenting Author); Josepha Barbarics (Co-Author); Stella-Louise Rosière (Co-Author); Catherine Walter-Laager (Co-Author)

Using implementation theory to enhance professionalization in the SELMA project (Single Paper)

Ingunn Størksen (Presenting Author)

<u>Session L 07</u> 16:00–17:30 Location: HS 15.14

# Toward a deeper understanding of teacher-student relationships and ways for improvement

Chair

Jantine Spilt

Discussant

Astrid Poorthuis

Teacher connective practices to foster their relationships with adolescents: a new questionnaire (Single Paper)

Margot Longeville (Presenting Author); Evelien Buyse (Co-Author); Hilde Colpin (Co-Author); Karine Verschueren (Co-Author); Jantine Spilt (Co-Author)

Multiple perspectives on relationship-building competencies in primary teacher education (Single Paper)

Liedewij Borremans (Presenting Author); Astrid Deryck (Co-Author); Jantine Spilt (Co-Author)

Perspective-taking in teacher-student interaction: Enhancing teachers' self-efficacy and sensitivity (Single Paper)

Hinke Endedijk (Presenting Author); Marjolein Zee (Co-Author); Fanny De Swart (Co-Author); Maarten Tim Mainhard (Co-Author)

Toward a deeper understanding of teacher-student relationships and ways for improvement (Symposium)

Need Supportive Teaching and Students' Engagement and Achievement: Cross-Subject Differences (Single Paper)

Debora Roorda (Presenting Author); Jeroen Lavrijsen (Co-Author); Karine Verschueren (Co-Author)

Session L 08 16:00–17:30 Location: HS 11.03

#### New developments in understanding mathematics anxiety.

Chair

Wim Van Dooren

Discussant

Anne Hoogmoed

Organiser

Jo Van Hoof

New developments in understanding mathematics anxiety. (Symposium)

Developmental trajectories of math anxiety and performance from grade 4 to grade 6 (Single Paper)

Anna Tapola (Co-Author); Pinja Jylänki (Co-Author); Riika Mononen (Co-Author); Johan Korhonen (Åbo Akademi University)

Not realizing natural-number based errors: A replication and extension study in two countries (Single Paper)

Jo Van Hoof (Presenting Author); Konstantinos Christou (Co-Author); Hilma Halme (Co-Author); Nele Wijckmans (Co-Author); Chloë Hoekx (Co-Author); Manos Kioutsioukis (Co-Author); Wim Van Dooren (Co-Author)

Negative affect relates to 5/6-year olds maths performance, but this link is not maths specific (Single Paper)

Raneem Hadadd (Presenting Author); Ella James-Brabham (Co-Author); Sylvia Gattas (Co-Author); Julia Bahnmueller (Co-Author); Ann Dowker (Co-Author); Silke Goebel (Co-Author); Kinga Morsanyi (Co-Author); Gaia Scerif (Co-Author); Franz Wortha (Co-Author); Iro Xenidou-Dervou (Co-Author); Krzysztof Cipora (Co-Author)

Longitudinal Trends in Gender Differences in Mathematics Anxiety Among School Students (Single Paper)

Florence Gabriel (Presenting Author); Rebecca Marrone (Co-Author); Abhinava Barthakur (Co-Author); John Kennedy (Co-Author)

Session L 09 16:00–17:30 Location: HS 15.12

# Sustainable educational innovation in Higher Education: Upscaling, transfer, and student involvement

Chair

Hannah Sloane

Discussant

Rachelle Esterhazy

Organiser

Tobias Jenert

Sustainable educational innovation in Higher Education: Upscaling, transfer, and student involvement (Symposium)

Roads to scale: How bottom-up innovations in higher education reach institution-wide implementation (Single Paper)

Nynke van Ketel (Presenting Author); Natalie Pareja Roblin (Co-Author); Bieke Schreurs (Co-Author); Frank Cornelissen (Co-Author)

Look Who's Talking: Multivoicedness in Students' Descriptions of their Disciplines (Single Paper)

Sabrina Schmöckel (Presenting Author)

From tension to quality - How student partners practice quality work in Higher Education (Single Paper)

Hannah Mülder (Presenting Author); Nora Bergstrom-Hansen (Co-Author); Cecilie Enqvist-Jensen (Co-Author)

Overcoming disciplinary cultures as innovation barriers: realising transfer potentials (Single Paper)

Hannah Sloane (Presenting Author); Tobias Jenert (Co-Author)

Session L 10 16:00–17:30 Location: HS 15.02

#### Retrieval Practice: How Generalizable are the Effects and how can they be Optimized?

Chair

Niklas Obergassel

Discussant

Tobias Richter

Organiser

Julian Roelle

Retrieval Practice: How Generalizable are the Effects and how can they be Optimized? (Symposium)

Emotion-Powered Retrieval: Emotional Design Boosts Effort in Retrieval Practice to Improve Learning (Single Paper)

Tino Endres (Presenting Author); Charlotte Vössing (Co-Author); Marlit Lindner (Co-Author); Alexander Renkl (Co-Author)

Combining Generative Tasks and Retrieval Tasks: The Role of Sequence and Generative Task Specificity (Single Paper)

Niklas Obergassel (Presenting Author); Alexander Renkl (Co-Author); Tino Endres (Co-Author); Matthias Nückles (Co-Author); Shana Carpenter (Co-Author); Julian Roelle (Co-Author)

Written Retrieval Practice of Vocabulary Prepares Students for Speaking a Foreign Language in Class (Single Paper)

Gesa van den Broek (Presenting Author); Maud Boeren (Co-Author); Nienke Smit (Co-Author)

Does Retrieval Practice Benefit Developing Learners? Meta-Analytic Evidence and Insights (Single Paper)

Steven Pan (Presenting Author); Enming Zhang (Co-Author); Inez Zung (Co-Author)

Session L 11 16:00–17:30 Location: HS 01.15

# Instructional quality in (foreign) language education – New instruments, new perspectives

Chair

Stefan Keller

Discussant

Anna-Katharina Praetorius

Organiser

Eva Wilden; Henning Rossa; Joel Guttke; Kirsti Klette;

Raphaela Porsch

Instructional quality in (foreign) language education – New instruments, new perspectives (Symposium)

Observation manuals as lenses into the classroom-towards a common language of language instruction? (Single Paper)

Kirsti Klette (Presenting Author); Marte Blikstad-Balas (Co-Author)

Testing the ELT\_IQ model using classroom video ratings and learner performance data (Single Paper)

Henning Rossa (Presenting Author); Johannes Hartig (Co-Author); Daniel Mischa Helsper (Co-Author)

Factorial validity of student and teacher ratings of cognitive activation in primary EFL education (Single Paper)

Joel Guttke (Presenting Author); Raphaela Porsch (Presenting Author); Charlott Rubach (Co-Author); Jennifer Rahden (Co-Author); Eva Wilden (Co-Author)

Combining general and subject-specific models of teaching quality to support teacher training (Single Paper)

Stefan Keller (Presenting Author); Angela Schlatter (Co-Author)

Session L 12 16:00–17:30 Location: HS 12.01

#### Students' Social Networks in Higher Education

Chair

Marieke Meeuwisse

Organiser

Jasperina Brouwer

Social integration in STEM: Development and contribution of peer relationships to achievement (Single Paper)

Siyu Jiang (Presenting Author); Christoph Stadtfeld (Co-Author)

The role of peer networks in the transition to university among STEM undergraduate students (Single Paper)

Jasperina Brouwer (Presenting Author)

Coevolution of sense of belonging and professional identity with peer networks in higher education (Single Paper)

Pieter van Lamoen (Presenting Author); Marieke Meeuwisse (Co-Author); Annemarie Hiemstra (Co-Author); Arends Lidia (Co-Author); Sabine Severiens (Co-Author); Jasperina Brouwer (Co-Author)

Students' Social Networks in Higher Education (Symposium)

Session L 13 16:00–17:30 Location: HS 15.03

#### Early childhood professional's well-being

Chair

Elisa Oppermann

Discussant

Pauline Slot

Intention to leave, burnout, and job satisfaction of early-career preschool teachers in Austria (Single Paper)

Tina ECKSTEIN-MADRY (Presenting Author); Eva-Maria Embacher (Co-Author); Wilfried Smidt (Co-Author)

Preventing ECEC professionals' emotional exhaustion through a supportive organisational climate (Single Paper)

Elisa Oppermann (Presenting Author); Theresia Gabriele Hummel (Co-Author); Yvonne Anders (Co-Author)

"Values vs Resources": ECE Centre Leaders' Narratives on Work-related Wellbeing in  $2034~(\mathrm{Single~Paper})$ 

Linda Nurhonen (Presenting Author); Mari Saha (Co-Author); Elina Fonsén (Co-Author); Tamara Cumming (Co-Author)

Early childhood professional's well-being (Symposium)

Teachers' occupational well-being in relation to children's social competence in tod-dler classrooms (Single Paper)

Jenni Salminen (Presenting Author); Eija Pakarinen (Co-Author); Minna Torppa (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author)

Session L 14 16:00-17:30 Location: HS 02.21

How does classroom heterogeneity affect students' psycho-social experience in school?

Chair Camilla Rjosk Discussant Karina Karst Organiser

Claudia Neuendorf

How does classroom heterogeneity affect students' psycho-social experience in school? (Symposium)

Social Processes in Heterogeneous Classrooms: Links to Classroom Composition and Teaching  $(Single\ Paper)$ 

Svenja Hascher (Presenting Author); Claudia Neuendorf (Co-Author); Camilla Rjosk (Co-Author)

Structural Racism Undermines Academic Performance and Belonging in Superdiverse Schools (Single Paper)
Orhan Agirdag (Presenting Author)

The effects of student heterogeneity in classrooms on psycho-social outcomes: A systematic review (Single Paper)

Claudia Neuendorf (Presenting Author); Svenja Hascher (Co-Author); Camilla Rjosk (Co-Author)

Classroom competence diversity and the effect of classroom rank on educational outcomes  $(\mathrm{Single}\ \mathrm{Paper})$ 

Emanuele Fedeli (Presenting Author)

Session L 15 16:00–17:30 Location: HS 02.01

Multi-Level Extension to the Concept of Professional Learning Communities

Chair
Katja Kansteiner
Discussant
Irit Sasson
Organiser
Peter Theurl

 $\begin{tabular}{ll} \textbf{Multi-Level Extension to the Concept of Professional Learning Communities} & \textbf{(Symposium)} \\ \end{tabular}$ 

From Superficial Sharing to Deep Inquiry and Reflection in PLCs by Using Models and Tools (Single Paper)

Anne Berit Emstad (Presenting Author); Bård Knutsen (Co-Author)

Fostering reflection and inquiry in PLCs: Facilitators' perceptions and challenges (Single Paper)

Katja Kansteiner (Presenting Author); Elvira Barrios (Co-Author); SOFIA AVGITIDOU (Co-Author)

Emerging Faculty Learning Communities in Higher Education: A Case Study of how, what and why (Single Paper)

Loucas Louca (Presenting Author); Chrystalla Papademetri-Kachrimani (Co-Author)

The Impact of Student-Teacher PLCs on Teaching Skills, Professional Identity, and Collaboration (Single Paper)

Peter Theurl (Presenting Author); Katharine Rümmele (Co-Author); Eva Frick (Co-Author)

Session L 16 16:00–17:30 Location: HS 02.23

## Understanding Heterogeneity in Mathematical Learning and Learning Disorders

Chair

Karin Landerl

Understanding Heterogeneity in Mathematical Learning and Learning Disorders (Symposium)

Emotional-behavioral problems in children with specific learning disorders (Single Paper)

Sarah Lamb (Presenting Author); Kristina Moll (Co-Author); Christin Vanauer (Co-Author); Heike Mehlhase (Co-Author); Gerd Schulte-Körne (Co-Author); Jörg-Tobias Kuhn (Co-Author)

RAN Quantities and Fluency in Arithmetic and Reading Skills - Differences in Associations Across Age (Single Paper)

Sara Huotari (Presenting Author); Riikka Heikkilä (Co-Author); Minna Torppa (Co-Author); Mikko Aro (Co-Author); Eija Räikkönen (Co-Author); Tuire Koponen (Co-Author)

Understanding heterogeneity in preschoolers at risk for difficulties in mathematics learning (Single Paper)

Bert De Smedt (Presenting Author); Sara Peeters (Co-Author)

The role of HNE in the intergenerational transmission of math skills (Single Paper) Minna Torppa (Presenting Author); Maria Psyridou (Co-Author); Daria Khanolainen (Co-Author); Tuire Koponen (Co-Author); Jenni Salminen (Co-Author)

Session L 17 16:00–17:30 Location: SZ 15.21

## Understanding and promoting diagnostic thinking of teachers

Chair

Timo Leuders
Discussant

Stefanie Vanbecelaere

Pre-service teachers' use of information when assessing first graders' number sense (Single Paper)

Simone Wirth (Presenting Author); Marita Friesen (Co-Author); Philipp Kathleen (Co-Author); Streit Christine (Co-Author)

On the diagnostic process when pre-service teachers judge student texts: an eye tracking study (Single Paper)

Dimitra Kolovou (Presenting Author); Yves Furer (Co-Author); Saskia Schreiter (Co-Author); Jan Hochweber (Co-Author); Anna-Katharina Praetorius (Co-Author)

Uncovering and Advancing Diagnostic Skills in Physical Education Teachers (Single Paper)

Christian Leukel (Presenting Author); Katharina Loibl (Co-Author); Timo Leuders (Co-Author)

Understanding and promoting diagnostic thinking of teachers (Symposium)

Teachers' judgment processes in ambiguous diagnostic situations (Single Paper) Elif Özel (Presenting Author); Katharina Loibl (Co-Author); Timo Leuders (Co-Author) Session L 18 16:00–17:30 Location: HS 46.01

Exploring collaborative learning: How do group composition and task design influence group dynamics?

Chair

Lukas Mundelsee; Susanne Ju-

rkowski

Discussant

Anne Deiglmayr

Exploring collaborative learning: How do group composition and task design influence group dynamics? (Symposium)

Investigating the interplay between knowledge co-construction and group-level regulation in CSCL (Single Paper)

Kateryna Zabolotna (Presenting Author); Hanna Jarvenoja (Co-Author); Jonna Malmberg (Co-Author)

Enhanced collaborative communication in physics through interleaved task sequencing (Single Paper)

Maria Danzglock (Presenting Author); Martin Hänze (Co-Author); Roland Berger (Co-Author)

Interaction dynamics in classroom group work (Single Paper)

Tomáš Lintner (Presenting Author); Tomáš Diviák (Co-Author); Barbora Nekardová (Co-Author)

What shapes knowledge co-construction? Examining sympathy, prior knowledge, and introversion (Single Paper)

Lukas Mundelsee (Presenting Author); Susanne Jurkowski (Co-Author)

Session L 19 16:00–17:30 Location: HS 15.05

Understanding socio-emotional aspects in students' family and school context

Chair

Tina Hascher

Discussant

Eleftheria Gonida

Organiser

Rebecca Collie

Understanding socio-emotional aspects in students' family and school context (Symposium)

The effectiveness of teacher disruption management interacts with emotions in the classroom (Single Paper)

Irina Rosa Kumschick (Presenting Author); Cecile Tschopp (Co-Author); Larissa Troesch (Co-Author); Annette Tettenborn (Co-Author)

Students' perceived social-emotional competence and teacher and parental autonomy support (Single Paper)

Rebecca Collie (Presenting Author); Richard Ryan (Co-Author)

Parents' and teachers' perspectives of primary students' subjective well-being in school  $({\rm Single~Paper})$ 

Janka Goldan (Presenting Author); Sandra Grueter (Co-Author); Carmen Zurbriggen (Co-Author)

How are parents' and teachers' perceptions of children's empathy related to their prosocial behavior (Single Paper)

Tina Hascher (Presenting Author); Simone Halliday (Co-Author); Ankica Jurkic (Co-Author)

Session L 20 16:00–17:30 Location: Festsaal

Relevant cognitive and non-cognitive factors for math learning: New directions for math education

Chair

Verena Dresen **Discussant** 

Korbinian Moeller

The effect of game elements in a mathematical task on children with dyscalculia (Single Paper)

Manuel Ninaus (Presenting Author); Verena Dresen (Co-Author); Stefan Huber (Co-Author); Antero Lindstedt (Co-Author); Kristian Kiili (Co-Author); Elisabeth Weiss (Co-Author); Korbinian Moeller (Co-Author)

Switch Cost in Arithmetic Operations and its Relation to Math Anxiety (Single Paper)

Yarden Gliksman (Presenting Author)

Relevant cognitive and non-cognitive factors for math learning: New directions for math education (Symposium)

How Jumping and Balancing Build Math Skills: Insights into the Motor-Math Link in 6-10-Year-Olds (Single Paper)

Venera Gashaj (Presenting Author); Korbinian Moeller (Co-Author); Dragan Trninic (Co-Author)

Session L 21 16:00-17:30 Location: HS 44.11

Teacher Mindset Interventions: What Can They Do for Whom and How Does the Context come into Play?

Chair

Katharina Asbury

Discussant

Uta Klusmann

Enhancing Pre-Service Teachers' Growth Mindset is Beneficial for Their Low-Achieving Students, too (Single Paper)

Katharina Asbury (Presenting Author); Bastian Carstensen (Co-Author)

Growth mindset interventions narrow equity gaps in introductory biology courses (Single Paper)

Lisa Limeri (Presenting Author); Anisha Navlekar (Co-Author); Anastasia Chouvalova (Co-Author); Rob Furrow (Co-Author); Laci Gerhart (Co-Author); Colin Harrison (Co-Author); John Hinz (Co-Author); Kimberly Pigford (Co-Author); Adrienne Smith (Co-Author); Makita White4 (Co-Author); Elizabeth Canning (Co-Author)

Supporting Growth Mindset in Classrooms: Evaluating the Impact of a Year-long Teacher Fellowship  $(Single\ Paper)$ 

Christopher Bryan (Presenting Author); Cameron Hecht (Co-Author); Matthew Giani (Co-Author); David Yeager (Co-Author)

Teacher Mindset Interventions: What Can They Do for Whom and How Does the Context come into Play? (Symposium)

Supporting Pre-Service teacher's first semester experience with a mindset module (Single Paper)

Fiona Boylan (Presenting Author)

Session L 22 16:00–17:30 Location: HS 11.02

Capturing Learning and Emotional Experiences in Classrooms through Ecological Momentary Assessment

 ${\bf Chair}$ 

Karine Verschueren

Discussant Junlin Yu Teacher-Student Interaction and Class Difficulty: Joint Role in Student Emotions in Class (Single Paper)

Eline Camerman (Presenting Author); Jeroen Lavrijsen (Co-Author); Peter Kuppens (Co-Author); Karine Verschueren (Co-Author)

Change and Transmission of Students' and Teachers' Lesson-Specific Emotions in Grade 3 Classrooms (Single Paper)

Eija Pakarinen (Presenting Author); Matilda Sorkkila (Co-Author); Lars-Erik Malmberg (Co-Author); Sanni Pöysä (Co-Author); Noona Kiuru (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author)

Trait and State Relations between Teachers' Interpersonal Behavior and Students' Emotions (Single Paper)

Lisa Stempfer (Presenting Author); Jonathan Fries (Co-Author); Thomas Goetz (Co-Author)

Capturing Learning and Emotional Experiences in Classrooms through Ecological Momentary Assessment (Symposium)

Boredom and Psychological Needs in the Classroom: An Experience Sampling Study (Single Paper)

Anke Zeißig (Presenting Author); Julia Moeller (Co-Author); Saskia Fischer (Co-Author); Ludwig Bilz (Co-Author)

Session L 23 16:00–17:30 Location: HS 15.04

Outcomes and Antecedents of Autonomy-Supportive and Controlling Parenting Styles Across Contexts

Chair

Moti Benita

Discussant

Maarten Vansteenkiste

Organiser

Lennia Matos

Outcomes and Antecedents of Autonomy-Supportive and Controlling Parenting Styles Across Contexts (Symposium)

Parental Hope Vs. Death Anxiety During War: A Self determination perspective (Single Paper)

Rinat Cohen (Presenting Author); Bilha Paryente (Co-Author)

Socialization of Emotion Regulation: The Role of Parental Autonomy Support and Control (Single Paper)

Moti Benita (Presenting Author)

Neighborhood safety and Parenting: The role of autonomy support, control and monitoring (Single Paper)

Lennia Matos (Presenting Author); Rafael Gargurevich (Co-Author); Bart Soenens (Co-Author); Joachim Waterschoot (Co-Author)

The Vicious Cycle of Maternal Depression and Controlling Parenting in the First Five Years (Single Paper)

Reut Nachoum (Presenting Author); Anat Moed (Co-Author); Nir Madjar (Co-Author); Yaniv Kanat-Maymon (Co-Author)

Session L 24 16:00–17:30 Location: HS 03.01

#### Physiological measures in research on higher education teaching and learning

Chair

Anna Parpala

Discussant

Peter Edelsbrunner

Organiser

Liisa Postareff; Petri Nokelainen; Ulrich Dettweiler Physiological measures in research on higher education teaching and learning (Symposium)

Exploring Higher Education Teachers' Emotions in Teaching Situations (Single Pa-

per)

Anna Wallin (Presenting Author); Laura Pylväs (Co-Author); Heta Rintala (Co-Author); Milla Räisänen (Co-Author); Merly Kosenkranius (Co-Author); Petri Nokelainen (Co-Author); Anna Parpala (Co-Author); Liisa Postareff (Co-Author); Ilmari Puhakka (Co-Author)

Students' emotional valence and physiological arousal in flipped and lecture-based learning (Single Paper)

Susanna Hartikainen (Presenting Author); Petri Nokelainen (Co-Author); Ilmari Puhakka (Co-Author); Riikka Kangaslampi (Co-Author)

Note-Taking Strategies and EEG-measured Engagement in higher education video-based learning (Single Paper)

Marijn Gijsen (Presenting Author); Konrad Rudnicki (Co-Author); Sven De Maeyer (Co-Author); David Gijbels (Co-Author)

Self-assessment feedback in higher education: the role of emotions, valence and self-efficacy (Single Paper)

Charlotte Van Tricht (Presenting Author); David Gijbels (Co-Author); Vincent Donche (Co-Author)

Session L 25 16:00–17:30 Location: HS 25.11

#### Differential teacher expectations among diverse student populations

Chair

Jan-Willem Strijbos

Discussant

Sabine Glock

Organiser

Anneke Timmermans

Differential teacher expectations among diverse student populations (Symposium)

Using virtual reality to combat bias in the classroom: A pilot study (Single Paper) Frauke Meyer (Presenting Author); Joanna Smith (Co-Author); Georgia Rudd (Co-Author); Christine Rubie-Davies (Co-Author); Melina Amos (Co-Author); Roseanna Baker (Co-Author)

Exploring Teacher Expectations in Remedial tracks: A Multiple Case Study (Single Paper)

Ingeborg Placklé (Presenting Author); Nadine Engels (Co-Author); Heline Van Peteghem (Co-Author)

Second language learning and teacher expectations: A systematic review (Single Paper)

Christine Rubie-Davies (Presenting Author); Mengnan Li (Co-Author)

A systematic review on teachers' transition recommendations in Dutch primary and secondary education (Single Paper)

Nathalia Drent (Presenting Author); Jan-Willem Strijbos (Co-Author); Anneke Timmermans (Co-Author)

Session L 26 16:00–17:30 Location: HS 11.01

Methodologies towards the evaluation of the effectiveness of interdisciplinary programs

Chair

Baruch Schwarz

Discussant

Peter Reimann

Object Tracing: Conceptualizing Interdisciplinary Processes to Understand Effectiveness (Single Paper)

Julia Clarke (Presenting Author); Adam Papendieck (Co-Author)

 ${\bf Actor\text{-}network\ theory\ for\ testing\ the\ efficiency\ of\ interdisciplinary\ programs\ (Single\ constraints)}$ 

Paper)

Baruch Schwarz (Presenting Author)

Bridging disciplines through a simulation: Enhancing interdisciplinary learning in higher education (Single Paper)

Hanni Muukkonen (Presenting Author); Anu Kajamaa (Co-Author)

Methodologies towards the evaluation of the effectiveness of interdisciplinary programs (Symposium)

The role of epistemic games in understanding students' interdisciplinary problem solving (Single Paper)

Lina Markauskaite (Presenting Author); Natasha Arthars (Co-Author)

Session L 27 16:00–17:30 Location: HS 05.01 Experimentierhörsaal

#### Efficacy of Vocabulary Interventions in Early Educational Settings

#### Chair

Leonie Dargiewicz

Enhancing Vocabulary through Morphological Training: Insights from Two App-Based Interventions (Single Paper)

Janne von Koss Torkildsen (Presenting Author); Jarl Kleppe Kristensen (Co-Author); Amund Grothe (Co-Author); Andreas Falck (Co-Author)

Effect of Spanish Definition Supports on English Vocabulary of 4th Grade English Learners in the US (Single Paper)

Svenja Wehrhöfer (Presenting Author); Maria Carlo (Co-Author)

The Effectiveness of a Professional Development Intervention in Diverse Norwegian ECEC Settings (Single Paper)

Veslemøy Rydland (Presenting Author); Siri Steffensen Bratlie (Co-Author); Ratib Lekhal (Co-Author); Tiril Wilhelmsen (Co-Author); Vibeke Grøver (Co-Author)

Efficacy of Vocabulary Interventions in Early Educational Settings (Symposium)

Efficacy of a Digital-Based Vocabulary Intervention for German First Graders (Single Paper)

Leonie Dargiewicz (Presenting Author); Svenja Wehrhöfer (Co-Author); Annika Ohle-Peters (Co-Author); Nele McElvany (Co-Author)

Session L 28 16:00–17:30 Location: HS 15.06

#### **Emotions and Difficulties in Students and Teachers**

#### Chair

Tomi Jaakkola

Exploring effects regarding pre-service teachers' shame in mathematics (Single Paper)

Lars Meyer-Jenßen (Presenting Author)

Worrying or motivating? Students' reactions to their parents' motivational messages. (Single Paper)

RICHARD REMEDIOS (Presenting Author)

Design and Validation of the Primary-Secondary School Transitions Emotional Wellbeing Scale (Single Paper)

Charlotte Bagnall (Presenting Author); Emily Banwell (Co-Author); Divya Jindal-Snape (Co-Author); Carla Mason (Co-Author); Margarita Panayiotou (Co-Author); Pamela Qualter (Co-Author)

How does teacher and peer support influence the change of emotional and behavioral difficulties? (Single Paper)

Marie-Christine Vierbuchen (Presenting Author); Frances Hoferichter (Co-Author); Juliane Schlesier (Co-Author); Diana Raufelder (Co-Author)

# THURSDAY, 28 AUGUST 2025

Session M 01 08:30–10:00 Location: SR 15.45

#### Cognition, Metacognition, Emotions and Self-Regulated Learning

#### Chair

Mayra Mascareño Lara

Effects of metacognitive prompts in reading on self-regulated activities and learning performance (Poster Presentation)

Martina Bažon (Presenting Author); Rosanda Pahljina-Reinić (Co-Author); Barbara Rončević Zubković (Co-Author); Svjetlana Kolić-Vehovec (Co-Author)

Exploring Metacognition and Self-Regulation Among In-Service Teachers in an Online Course (Poster Presentation)

Shirley Miedijensky (Presenting Author); David Miedijensky (Co-Author)

Applying Cognitive Theories to Education: Effort Framing Effects on Memorisation vs. Education Tasks (Poster Presentation)

Yiting Hao (Presenting Author); Lars-Erik Malmberg (Co-Author); Gabriel Stylianides (Co-Author)

Planning promotes regular studying –the higher the plan quality the better: a micro-randomized trial (Poster Presentation)

Mirijam Schaaf (Presenting Author); Garvin Brod (Co-Author); Jasmin Breitwieser (Co-Author)

Promotion of Self-Regulated Learning in Individual Coaching of Secondary School Students (Poster Presentation)

Anna Rebel (Presenting Author); Joost Jansen in de Wal (Co-Author); Jaap Schuitema (Co-Author); Carla Van Boxtel (Co-Author)

Session M 02 08:30–10:00 Location: SR 15.44

#### Eamining Students' Epistemic Processes, Creativity and Etnicity

#### Chair

Kaja Mädamürk

The knowledge revival in curriculum studies and education (Poster Presentation)

Michiel Wils (Presenting Author); Tim Surma (Co-Author); Jasper Nijlunsing (Co-Author); Claudio Vanhees (Co-Author); Paul Kirschner (Co-Author)

Estimating ethnic diversity in large educational data using learning analytics (Poster Presentation)

Josmario Albuquerque (Presenting Author); Bart Rienties (Co-Author)

Calculated decisions: Subjective numeracy and objective arithmetic uniquely predict optimal choices (Poster Presentation)

Lucas Miller (Presenting Author); Michael Slipenkyj (Co-Author); Alexander Avdellas (Co-Author); Bijan Tabrizian (Co-Author); Ian Lyons (Co-Author)

Latent Profile Analysis of Creativity in Adolescents with and without Special Educational Needs (Poster Presentation)

Tania Pasarín-Lavín (Presenting Author); Trinidad Garcia (Co-Author); Celestino Rodríguez (Co-Author); Jose Carlos Nuñez (Co-Author)

Scented creativity in children's drawings (Poster Presentation)

Fabien Bitu (Presenting Author); Michèle Molina (Co-Author); Federica Cilia (Co-Author)

Epistemic processes in visual history: Interviews with domain specialists (Poster Presentation)

Marjaana Puurtinen (Presenting Author); Mikko Kainulainen (Co-Author); Clark Chinn (Co-Author)

Session M 03 08:30–10:00 Location: SR 15.48

#### Principals', Teachers' and Students' Emotions

#### Chair

Myrthe Lubbers

Dynamics of Emotions: The Co-development of Emotions within the Classroom (Poster Presentation)

Arian Musliu (Presenting Author)

Music in Mood Regulation: Coping Strategies for Managing Stress & Emotional Demands Among Principals (Poster Presentation)

Iiris Virtasalo (Presenting Author); Emilia Makkonen (Presenting Author)

Inner World of Teachers – Self-compassion, Self-efficacy and Self-esteem (Poster Presentation)

Perim Uyar (Presenting Author); Yesim Capa Aydin (Co-Author)

Distinct Value Facets and Their Relations with Medical Students' Enjoyment and Anxiety (Poster Presentation)

Nadja Karossa (Presenting Author); Ann-Kathrin Schindler (Co-Author); Thomas Rotthoff (Co-Author); Sabine Polujanski (Co-Author); Markus Dresel (Co-Author); Ingo Kollar (Co-Author); Sarah Junginger (Co-Author); Tanja Bross (Co-Author); Ulrike Nett (Co-Author)

The Impact of Fear and Hope in Climate Change Narratives on Children's Attitudes and Actions (Poster Presentation)

Marije van Amelsvoort (Presenting Author); Suzanne van der Beek (Co-Author); Rosalyn Borst (Co-Author); Martijn Goudbeek (Co-Author); Ruud Koolen (Co-Author); Semmy Claassen (Co-Author); Phillip Looij (Co-Author)

The association between motivation and internalizing symptoms for EL vs non-EL students in the U.S. (Poster Presentation)

Omnia Faek (Presenting Author); Bridget Dever (Co-Author)

Session M 04 08:30–10:00 Location: SR 15.42

#### Teacher Training and Professional Development

#### Chair

Mareike Brehmer

Analysis of the three formats of rational number in Spanish primary school text-books (Poster Presentation)

Rosario Sánchez (Presenting Author); Santiago Vicente (Co-Author); Jose Chamoso (Co-Author); Josetxu Orrantia (Co-Author); Paula Muñoz (Co-Author)

Examination of Reflective Dialogue Between Primary School Teachers Using Mercer's Types of Talks (Poster Presentation)

Simone Rijksen (Presenting Author); Nadira Saab (Co-Author); Arjen de Vetten (Co-Author); Wilfried Admiraal (Co-Author)

Pedagogical content knowledge and teaching confidence of Lithuanian mathematics teachers (Poster Presentation)

Monika Grigaliuniene (Presenting Author); Erno Lehtinen (Co-Author)

Conceptual Change among In-service English Teachers through Attentive Teaching (Poster Presentation)

Shira Farby (Presenting Author); Yaron Schur (Co-Author)

Implementing 4C/ID in in-service training programs: A systematic review (Poster Presentation)

Melanie Neck (Presenting Author); Timo Leuders (Co-Author); Frank Reinhold (Co-Author)

Job demands and resources of beginning teachers in relation to well-being and intention to quit. (Poster Presentation)

Fenny van Daalen-Visscher (Presenting Author); Hanke Korpershoek (Co-Author); Matthijs Warrens (Co-Author); Thibault Coppe (Co-Author)

Session M 05 08:30–10:00 Location: HS 11.03

## Learning activities and instructional support in Augmented Reality-based learning

Chair

Stephanie Moser **Discussant** Jule Krüger Does interactive learning compensate for negative effects when learning with augmented reality? (Single Paper)

Josef Buchner (Presenting Author)

Exploring Gaze Patterns in Augmented Reality-Based Learning of a Production

Process (Single Paper)

Jana Gonnermann-Müller (Presenting Author)

How do learning strategies in Augmented Reality-based learning impact knowledge and authenticity? (Single Paper)

Stephanie Moser (Presenting Author); Doris Lewalter (Co-Author)

Learning activities and instructional support in Augmented Reality-based learning (Symposium)

The use of prompts to support learning in an Augmented Reality learning environment (Single Paper)

Ines Deibl (Presenting Author); Daniela Straif (Co-Author); Ines Zeitlhofer (Co-Author); Lena von Kotzebue (Co-Author); Julia Eberle (Co-Author); Jörg Zumbach (Co-Author)

Session M 06 08:30–10:00 Location: HS 05.01 Experimentierhörsaal

# The role of intermediate knowledge in composite instructional designs

Chair

Timo Leuders

Discussant

Lennart Schalk

Organiser

Katharina Loibl

The role of intermediate knowledge in composite instructional designs (Symposium)

Adapting the comparison of incorrect and correct solutions to students' intermediate knowledge (Single Paper)

Cagla Dikme (Presenting Author); Timo Leuders (Co-Author); Kirsten Brunner (Co-Author); Katharina Loibl (Co-Author)

 $\textbf{Failed attempts as preparation for subsequent instruction} \ (Single \ Paper)$ 

Ido Roll (Presenting Author); Gila Horesh (Co-Author); Einat Heyd-Metzuyanim (The Technion Israel Institute of Technology)

Effects of preparation activities on two kinds of intermediate knowledge and exploring a new measure (Single Paper)

Katharina Ockl (Presenting Author); Vanessa Graf (Co-Author); Inga Glogger-Frey (Co-Author)

Do goal formulations affect the breadth of intermediate knowledge and impact learning in PS-I? (Single Paper)

Charleen Brand (Presenting Author); Katharina Loibl (Co-Author); Nikol Rummel (Co-Author)

Session M 07 08:30–10:00 Location: HS 46.01

Moving the Circumplex Model Forward: Innovative Coding Methods to Observe (De)Motivating Teachers

Chair

Nathalie Aelterman

Organiser

Julien Chanal

The SIS-PE-Coder: A Tool for Observing Teachers' (De)Motivating Teaching with the Circumplex Model (Single Paper)

Nele Van Doren (Presenting Author); Sofie Compernolle (Co-Author); Leen Haerens (Co-Author); Arne Bouten (Co-Author); Laura Hesters (Co-Author); Taren Sanders (Co-Author); Ruben Vanderlinde (Co-Author); Nele Flamant (Co-Author); Maarten Slembrouck (Co-Author); Katrien De Cocker (Co-Author)

Analyzing and Quantifying (De)motivating Teaching Styles through Video Coding (Single Paper)

Bruno Remolif (Presenting Author); Delphine Paumier (Co-Author); Julien Chanal (Co-Author)

Capturing the Dynamics of Motivating Teaching: A Real-time Observation Instrument (Single Paper)

Teuntje van Heese (Presenting Author); Lisette Hornstra (Co-Author); Kim Stroet (Co-Author); Heleen Pennings (TNO)

Moving the Circumplex Model Forward: Innovative Coding Methods to Observe (De)Motivating Teachers (Symposium)

Observed Motivating Teaching Behaviours In Physical Education: Review From Self-Determination Theory (Single Paper)

Javier Coteron (Co-Author); Javier Sevil-Serrano (Co-Author); Evelia Franco (Co-Author); Alba González-Peño (Universidad Politécnica de Madrid)

Session M 08 08:30–10:00 Location: HS 11.01

# Advances in the Field of Multimedia Design in Testing

Chair

Emely Hoch; Marlit Annalena

Lindner

Discussant

Mireille Bétrancourt

Advances in the Field of Multimedia Design in Testing (Symposium)

The Memory Cue Effect in Multimedia Testing - The Impact of Decorative and Representational Pictures (Single Paper)

Franziska Wehrhahn (Presenting Author); Sina Lenski (Co-Author); Johanna Werner (Co-Author); Martin Schulze (Co-Author); Martin Merkt (Co-Author); Marlit Annalena Lindner (Co-Author); Stefan Stürmer (Co-Author); Hannes Schröter (Co-Author)

Static and Dynamic Multimedia Elements in Mathematics Word Problems and the Role of Text Modality (Single Paper)

Marlit Annalena Lindner (Presenting Author); Tom Ehrhart (Co-Author); Tim Höffler (Co-Author)

Investigating Multimedia Design in Item Stem and Item Response Options of Multiple-Choice Questions (Single Paper)

Emely Hoch (Presenting Author); Salome Flegr (Co-Author); Katharina Scheiter (Co-Author); Jan-Philipp Burde (Co-Author); Marlit Annalena Lindner (Co-Author); Jochen Kuhn (University of Munich (LMU))

A Layered Model to Address Complexities in Multimedia Assessment Research and Design (LAMMP) (Single Paper)

Andrienne Kerckhoffs (Presenting Author); José Janssen (Co-Author); Ron Pat-El (Co-Author); Halszka Maria Jarodzka (Co-Author)

Session M 09 08:30–10:00 Location: HS 02.21

#### Interprofessional Collaboration in ECEC in Different European Contexts

Chair

Jochen Devlieghere

Discussant

Trynke Keuning

Organiser

Jana van der Zwart-Langner; Lobke Van Lombergen; Marian Habermehl-Ooms Interprofessional Collaboration in ECEC in Different European Contexts (Symposium)

Interprofessional collaborative practice in special needs intervention in Norway and the Netherlands (Single Paper)

Jana van der Zwart-Langner (Presenting Author)

Challenging the split system in ECEC: The Role of Interprofessional Collaboration (Single Paper)

Lobke Van Lombergen (Presenting Author); Jochen Devlieghere (Co-Author)

A Dyadic Analysis of Interprofessional Collaboration in ECEC (Single Paper) Marian Habermehl-Ooms (Presenting Author); Emma Nitert (Co-Author)

Interprofessional Collaboration in ECEC a Comparison between Six European Countries (Single Paper)

Marian Habermehl-Ooms (Presenting Author); Jana van der Zwart-Langner (Presenting Author)

Session M 10 08:30–10:00 Location: HS 02.01

# Exploring AI's Role in Personalized Learning and Evidence-Based Educational Advances

Chair

Raija Hämäläinen

Discussant

Bram De Wever

Organiser

Danial Hooshyar

Exploring AI's Role in Personalized Learning and Evidence-Based Educational Advances (Symposium)

Measuring (Meta) Emotion, Motivation, Cognition Using Digital Trace Data: A Systematic Review (Single Paper)

Kaja Toomla (Presenting Author); Xiaojing Weng (Co-Author); Eve Kikas (Co-Author); Elina Malleus-Kotsegarov (Co-Author); Kati Aus (Co-Author); Liina Malva (Co-Author); Roger Azevedo (Co-Author); Danial Hooshyar (Co-Author)

Advancing AI in Education with Simulated Learners to Enhance SRL in Human Students (Single Paper)

Roger Azevedo (Presenting Author); Megan Wiedbusch (Co-Author); Ang Li (Co-Author); Matthew Moreno (Co-Author)

Key Indicators of Learning Competence in Estonian Middle School Math: A Bayesian Analysis (Single Paper)

Danial Hooshyar (Presenting Author); Eve Kikas (Co-Author); Elina Malleus-Kotsegarov (Co-Author); Kati Aus (Co-Author); Liina Malva (Co-Author)

Beyond Text-to-Text: An Overview of Multimodal and Generative Artificial Intelligence for Education (Single Paper)

Ville Heilala (Presenting Author); Roberto Araya (Co-Author); Raija Hämäläinen (Co-Author)

Session M 11 08:30–10:00 Location: HS 15.02

## Motivational Dynamics in Interaction: What Really Happens Between Teachers and Their Students

Chair

Anne Kosubek

Discussant

Marko Lüftenegger

Motivating Moments in the Classroom? Dyadic Links Between Teacher Enthusiasm and Student Motivation (Single Paper)

Anne Kosubek (Presenting Author); Hanna Gaspard (Co-Author); Hannes Schröter (Co-Author); Fani Lauermann (University of Bonn)

A Day at School: The Interplay between Observed Teaching and Student Motivation over a Single Day (Single Paper)

Jonne Bloem (Presenting Author); Barbara Flunger (Co-Author); Kim Stroet (Co-Author); Lisette Hornstra (Co-Author)

Aligning Student-Teacher Agreement on Student Motivation Using Feedback (Single Paper)

Jan Beck (Presenting Author)

Motivational Dynamics in Interaction: What Really Happens Between Teachers and Their Students (Symposium)

Patterns of Teacher Interaction Styles in Relation to Well-Being and Teacher–Student Interaction (Single Paper)

Sze Wah Chan (Presenting Author); Sanni Pöysä (Co-Author); MARJA-KRISTIINA LERKKA-NEN (Co-Author); Eija Pakarinen (Co-Author)

Session M 12 08:30–10:00 Location: HS 02.11

# Exploring the Interplay of Math Language and Mathematics: Insights from Dual-Language-Learners

Chair

Bert De Smedt

Discussant

Paul Leseman

Organiser

Eylül Turan

Exploring the Interplay of Math Language and Mathematics: Insights from Dual-Language-Learners (Symposium)

The Role of Math Language in Numeracy in Linguistically Diverse Elementary-School Children (Single Paper)

Vera Hilger (Presenting Author); Sonja Ugen (Co-Author); Linda Romanovska (Co-Author); Katharina Tremmel (Co-Author); Christine Schiltz (Co-Author)

Patterns of math language and math abilities in dual-language-learners: A Latent Profile Analysis (Single Paper)

Bert De Smedt (Presenting Author); Eylül Turan (Co-Author)

Examining Causal Links between Math Language and Mathematics in Dual-Language-Learners (Single Paper)

Suzanne Splinter (Presenting Author); Eylül Turan (Co-Author); Elke Peters (Co-Author); Bert De Smedt (Co-Author); Joke Torbeyns (Co-Author)

Advanced math in young children: The contribution of math language and home language (Single Paper)

Karen De Keersmaeker (Presenting Author); Patrick Onghena (Co-Author); Kris Van den Branden (Co-Author); Wim Van Dooren (KU Leuven)

Session M 13 08:30–10:00 Location: HS 15.03

## Theorising and Developing Design-Principles for Learning-to-Collaborate in and Across Professions

Chair

Riikka Hofmann **Discussant** Monika Nerland

Fostering Team Learning Through Multi-Source Feedback and Facilitated Debriefing (Single Paper)

Vitaliy Popov (Presenting Author); Catherine Gabelica (Co-Author)

Analysing Collaborative Diagnostic Reasoning Across Scenarios and Disciplines Using Simulations (Single Paper)

Melissa Özsoy (Presenting Author); Amadeus J. Pickal (Co-Author); Laura Brandl (Co-Author); Constanze Richters (Co-Author); Katharina Engelmann (Co-Author); Birgit J. Neuhaus (Co-Author); Ralf Schmidmaier (Co-Author); Frank Fischer (Co-Author); Martin Fischer (Co-Author); Christof Wecker (Co-Author); Michael Sailer (Co-Author); Matthias Stadler (Institute of Medical Education)

When We Say Professional 'Collaboration' What Do We Mean? (Single Paper) Riikka Hofmann (Presenting Author); Frank Fischer (Co-Author); Olga Chernikova (Co-Author); Catherine Gabelica (Co-Author); Vitaliy Popov (Co-Author); Martin Fischer (Co-Author); Oskar Lindwall (Co-Author); Sarah Pemberton (Co-Author); Mher Davtyan (Co-Author)

Theorising and Developing Design-Principles for Learning-to-Collaborate in and Across Professions (Invited Symposium)

Scaffolding Collaboration Effectively: A Meta-Analysis on the Roles of a Learner, a Task and Context (Single Paper)

Olga Chernikova (Presenting Author); Lixiang Gao (Co-Author); Frank Fischer (Co-Author)

Session M 14 08:30–10:00 Location: HS 25.11

# Prior Knowledge and Learning: New Theoretical and Methodological Developments

Chair

Noell Röhrig **Discussant** 

Patricia Alexander

The Role of Prior Knowledge in Children's Judgment of the Informativeness of Evidence (Single Paper)

Lucas Lörch (Presenting Author); Garvin Brod (Co-Author)

Learning in a Virtual Lab: The Role of Prior Knowledge, (Meta)Cognitive and Affective Processes (Single Paper)

Megan Wiedbusch (Presenting Author); Ang Li (Co-Author); Kevin Smith (Co-Author); Roger Azevedo (Co-Author)

Alternating Between Prior General and Specific Content Knowledge to Promote Science Literacy (Single Paper)

Christian Thurn (Co-Author); Sonja Peteranderl (Co-Author); Peter Edelsbrunner (Co-Author); Anne Deiglmayr (Co-Author); Julie Keller (Co-Author); Ralph Schumacher (Co-Author); Elsbeth Stern (ETH Zurich)

Prior Knowledge and Learning: New Theoretical and Methodological Developments (Symposium)

Prior Knowledge Effects on Learning from a Complex Systems Perspective: A Model Simulation  $({\rm Single~Paper})$ 

Michael Schneider (Presenting Author); Noell Röhrig (Co-Author)

Session M 15 08:30–10:00 Location: HS 15.05

"Learning to learn" from theory to practice: closing achievement gaps in schools and universities

#### Chair

Hugo Armando Brito Rivera **Organiser** 

Cristina Stringher

Learning to learn as a pedagogical construct: a literature meta-synthesis for an updated framework (Single Paper)

Cristina Stringher (Presenting Author)

Teachers' conceptions of Learning to Learn at University: a socio-cultural approach (Single Paper)

Hugo Armando Brito Rivera (Presenting Author); Cristina Stringher (Co-Author); Rossana Pia Laccone (Co-Author)

Evaluating a new conceptual model of "learner effectiveness" in Wales: A thematic analysis (Single Paper)

James Mannion (Presenting Author)

Knowledge of learning strategies and motivation to use them as indicators of L2L competence (Single Paper)

Eve Kikas (Presenting Author); Mikk Granström (Co-Author)

"Learning to learn" from theory to practice: closing achievement gaps in schools and universities (Symposium)

Session M 16 08:30–10:00 Location: HS 15.13

Beyond Learning Traces: Advancing Self-Regulated Learning with AI – From Measurement to Support

#### Chair

Joni Lämsä; Susanne de Mooij

Discussant Tina Seufert

Discussant

Beyond Learning Traces: Advancing Self-Regulated Learning with AI – From Measurement to Support (Symposium)

The effect of a dashboard-supported reflection intervention on goal attainment and essay quality (Single Paper)

Heleen van der West (Presenting Author); Susanne de Mooij (Co-Author); Joep van der Graaf (Co-Author); Charikleia Sparou (Co-Author); Inti Bistolfi (Co-Author); Martine Baars (Co-Author); Inge Molenaar (Co-Author)

Training secondary school students' SRL before learning with an AI-based Online Learning Environment (Single Paper)

Shruti Athavale (Presenting Author); Lyn Lim (Co-Author); Maria Bannert (Co-Author)

The role of individual differences in the enactment of self-regulated learning in a writing task (Single Paper)

Matti Kaarlela (Presenting Author); Joni Lämsä (Co-Author); Márta Sobocinski (Co-Author); Sanna Järvelä (Co-Author)

A Systematic Review of SRL: Integrating Multimodal Data and Artificial Intelligence  $({\rm Single~Paper})$ 

Susanne de Mooij (Presenting Author); Joni Lämsä (Co-Author); Lyn Lim (Co-Author); Olli Aksela (Co-Author); Shruti Athavale (Co-Author); Inti Bistolfi (Co-Author); Flora Jin (Co-Author); TONGGUANG LI (Co-Author); Roger Azevedo (Co-Author); Maria Bannert (Co-Author); Dragan Gasevic (Co-Author); Sanna Järvelä (Co-Author); Inge Molenaar (Co-Author)

Session M 17 08:30–10:00 Location: HS 44.11

#### Using electrodermal activity to study individuals' and groups' learning processes

 ${\bf Chair}$ 

Jason Harley Discussant

Reinhard Pekrun

Organiser

Tiina Törmänen

Using electrodermal activity to study individuals' and groups' learning processes (Symposium)

The role of EDA in studying regulation in collaborative learning with multimodal data (Single Paper)

Tiina Törmänen (Presenting Author); Eetu Haataja (Co-Author); Hanna Jarvenoja (Co-Author); Sanna Järvelä (Co-Author)

Electrodermal activity during reading, oral tasks, written tasks, and listening to feedback (Single Paper)

Héctor J. Pijeira-Díaz (Presenting Author); Ernesto Panadero (Co-Author); Alazne Fernández Ortube (Co-Author); Leire Pinedo (Co-Author); Lucía Ruth Barrenetxea Minguez (Co-Author); David Zamorano (Universidad de Deusto)

A Multimodal Approach to Capture Young Learners' Emotional Responses to Immediate Feedback (Single Paper)

Anne Horvers (Presenting Author); Tibor Bosse (Co-Author); Ard Lazonder (Co-Author); Lars-Erik Malmberg (Co-Author); Inge Molenaar (Co-Author)

Approaches to Examining Healthcare Trainees' Electrodermal Activation During Simulation Training (Single Paper)

Jason Harley (Presenting Author); Negar Matin (Co-Author); Sayed Azher (Co-Author); Lucia Patino (Co-Author); Keerat Grewal (Co-Author); Tiina Törmänen (Co-Author); Sebastian Wallot (Co-Author); Matthew Moreno (University of Central Florida)

Session M 18 08:30–10:00 Location: SZ 15.21

# The Better the Self-Assessment Accuracy the Better the Regulation and Performance? Not that Simple!

Chair

Julia Waldeyer
Discussant

Mariette van Loon

Organiser Julian Roelle The Better the Self-Assessment Accuracy the Better the Regulation and Performance? Not that Simple! (Symposium)

The Effect of Practice Problems and Cue Use on Self-assessment and Task Selection Accuracy (Single Paper)

Rakefet Ackerman (Presenting Author); Martine Baars (Co-Author)

Indirect Benefits of Retrieval Tasks and Task Granularity in Self-Regulated Restudy of Text Material (Single Paper)

Veit Kubik (Presenting Author); Tino Endres (Co-Author); kenneth koslowski (Co-Author); Florian Hahne (Co-Author); Alexander Renkl (Co-Author)

Rubrics Foster Self-Assessment Accuracy and Regulation in Journal Writing (Single Paper)

Linda Froese (Presenting Author); Niklas Obergassel (Co-Author); Julian Roelle (Co-Author)

How do Rubrics Affect Self-Assessment Accuracy and Regulation? An Experimental Think-Aloud Study (Single Paper)

Rebecca Krebs (Presenting Author); Julia Waldeyer (Co-Author); björn rothstein (Co-Author); Ernesto Panadero (Co-Author); Julian Roelle (Co-Author)

Session M 19 08:30–10:00 Location: HS 02.23

Design and use of a video library for teachers' professional learning: Obstacles and opportunities

Chair Courtney Bell Discussant

Jürgen Schneider; Niels Brouwer

Organiser

Inga Staal Jenset

Design and use of a video library for teachers' professional learning: Obstacles and opportunities (Symposium)

Using a Video Library to improve Teacher-Student Interactions (Single Paper) Sigrun Ertesvåg (Presenting Author); Grete Sørensen Vaaland (Presenting Author)

Using Video-Stimulated Recall Reflections as a Tool in Teacher Education (Single Paper)

Michel Cabot (Presenting Author); Gry Anette Tuset (Co-Author)

A video-based pedagogy of teacher education and its relationship to teacher candidate learning (Single Paper)
Inga Staal Jenset (Presenting Author)

Experiences with developing a controlled vocabulary for video tagging in teacher education (Single Paper)

Kirsti Klette (Presenting Author); Simen Grung (Co-Author)

Session M 20 08:30–10:00 Location: HS 11.02

Teachers' Role in Effective Integration of Educational Technology: Evidence for Teacher Dashboards

Chair

Anna Hilz; Jennifer Meyer

Discussant Michael Sailer Organiser

Markus Wolfgang Hermann

Spitzer

Teachers' Role in Effective Integration of Educational Technology: Evidence for Teacher Dashboards (Symposium)

The long-term usage of digital learning software relies on teachers (Single Paper) Markus Wolfgang Hermann Spitzer (Presenting Author); Korbinian Moeller (Co-Author); Jennifer Meyer (Co-Author); Lisa Bardach (Co-Author)

Practice Monitoring via Teacher Dashboards Increases Student Engagement and Math Performance (Single Paper)

Anna Hilz (Presenting Author); Jennifer Meyer (Co-Author)

Eliciting Metacognitive Feedback: Analyzing Eye-Tracking Data on the SRL-Teacher Dashboard (Single Paper)

Susan Verbunt-Janssen (Presenting Author); Carolien Knoop-van Campen (Co-Author); Martine Baars (Co-Author); Inge Molenaar (Co-Author)

How primary school teachers interact with dashboards: A structured interview approach (Single Paper)

Stefanie Vanbecelaere (Presenting Author); Bert Reynvoet (Co-Author); Fien Depaepe (Co-Author)

Session M 21 08:30–10:00 Location: HS 01.15

## Evaluating and communicating everyday science-related information

Chair

Kalypso Iordanou

Organiser

Dorothe Kienhues

Science education supports informed participation in science-related public discussions (Single Paper)

Ayelet Baram-Tsabari (Presenting Author); Yael Rozenblum (Co-Author); Elad Segev (Co-Author); Roy Yosef (Co-Author)

Beyond jargon: Suggestions for communicating science from journalists, scientists and non-experts (Single Paper)

Christiana Varda (Presenting Author); Kalypso Iordanou (Presenting Author)

Examining effects of methods and uncertainty information on science devaluation (Single Paper)

Holger Futterleib (Presenting Author); Eva Thomm (Co-Author); Guido Mehlkop (Co-Author); Johannes Bauer (Co-Author)

Evaluating and communicating everyday science-related information (Symposium)

Perception of different (socio-)scientific topics and individuals' online engagement (Single Paper)

Dorothe Kienhues (Presenting Author); Monika Taddicken (Co-Author); Stephan Winter (Co-Author); Nadine Bol (Co-Author)

Session M 22 08:30–10:00 Location: HS 15.04

# Metacognitive regulation in developing minds: Underlying behavioural and neurocognitive mechanims

Chair

Elien Bellon

Discussant

Claudia Roebers

Metacognitive development in arithmetic: Age-related differences in monitoring and control processes (Single Paper)

Eveline Jacobs (Presenting Author); Elien Bellon (Co-Author); Bert De Smedt (Co-Author)

The Relationship between Error Monitoring and Arithmetic Skills: Domain-general or Domain-specific? (Single Paper)

Naima Nigar (Presenting Author); Claudia Danielmeier (Co-Author); Lucy Cragg (Co-Author)

The changing nature of children's performance judgments: Metacognitive monitoring across development (Single Paper)

Donna Bryce (Presenting Author); Janina Eberhart (Co-Author)

Metacognitive regulation in developing minds: Underlying behavioural and neurocognitive mechanims (Symposium)

Error-Related Potentials and Metacognitive Monitoring in Arithmetic (Single Paper)

Shiva Taghizadeh (Presenting Author); Marcel Bengel (Co-Author); Clemens Brunner (Co-Author); Bert De Smedt (Co-Author); Roland H. Grabner (Co-Author); Stephan Vogel (Co-Author)

Session M 23 08:30–10:00 Location: Festsaal

Supporting Workplace Learning of Vulnerable Workers: Insights Across Sectors

Chair
Julian Decius
Discussant
David Gijbels

Enhancing Participation: Factors Influencing Work-Related Learning Among Vulnerable Learners (Single Paper)

Wendy Nuis (Presenting Author); Simon Beausaert (Co-Author); Eva Kyndt (Co-Author); Marijn Wijga (University of Maastricht)

No Formal Training, so What? Self-regulated and Informal Learning of Non-Permanent Gig Workers (Single Paper)

Julian Decius (Presenting Author); Carlotta Bunzel (Co-Author); Denise Messerli (Co-Author)

Understanding & Supporting the Dynamics of Production Workers' Workplace Learning Using a Mobile App (Single Paper)

Lisa Winkelman (Presenting Author); Nick Goossen (Co-Author); Marcella Hoogeboom (Co-Author); Maaike Endedijk (Co-Author)

Supporting Workplace Learning of Vulnerable Workers: Insights Across Sectors (Symposium)

A Conservation of Resources Lens on Knowledge Sharing and Knowledge Hiding in Vulnerable Workforces (Single Paper)

Hannah Krüger (Presenting Author); Julian Decius (Co-Author); Annelie Lorber (Co-Author)

Session M 24 08:30–10:00 Location: HS 15.12

Play, executive functions and self-regulation: Evidence from around the world

Chair

Valeska Grau Cardenas

Discussant

Kathy Hirsh-Pasek

Play, executive functions, creativity and mental health: Evidence from primary school children (Single Paper)

Valeska Grau Cardenas (Presenting Author); Carolina Araya (Co-Author); David Preiss (Co-Author); Magdalena Fuenzalida (Co-Author); Mayer Soto (Co-Author); Benjamín Carmona (Co-Author)

Self-regulated learning in playing 2D and 3D games: The affect, behavior, and cognition triad (Single Paper)

Mei-Shiu Chiu (Presenting Author)

Associating playing videogames and executive functions in socio-economically disadvantaged children. (Single Paper)

Pablo E. Torres (Presenting Author)

Play, executive functions and self-regulation: Evidence from around the world (Invited Symposium)

Play, Child! Evidence for Playfulness as a Facilitator of Executive Function and Self-Regulation (Single Paper)

Antonia Zachariou (Presenting Author); Ioulia Televantou (Co-Author)

Session M 25 08:30–10:00 Location: HS 12.01

## How to spark curiosity: New insights on curiosity and learning

Chair

Lisa Bardach

Discussant

Haoyan Huang

Organiser

Markus Wolfgang Hermann

Spitzer

How to spark curiosity: New insights on curiosity and learning (Symposium)

Illustrating Knowledge Gaps to Elicit Curiosity and Promote Engagement in Learning (Single Paper)

Luisa Frede (Presenting Author); Younes Strittmatter (Co-Author); Markus Wolfgang Hermann Spitzer (Co-Author)

From Clicks to Curiosity: How Curiosity Manifests in Self-Directed Online Information Seeking (Single Paper)

Lisa Bardach (Presenting Author); Aki Schumacher (Hector Research Institute of Education Sciences and Psychology)

Exploring the Impact of Curiosity and Extrinsic Rewards on Information Seeking and Memory (Single Paper)

Lieke van Lieshout (Presenting Author); Rick Hankel (Co-Author); Andrei Costache (Co-Author); Monika kazlauskaite (Co-Author); Harold Bekkering (Co-Author)

Be Curious and Persistent: Joint Roles of Curiosity and Persistence in Adolescents' STEM Learning (Single Paper)

Haoyan Huang (Presenting Author); Xin Tang (Co-Author); Ming-Te Wang (Co-Author)

Session M 26 08:30–10:00 Location: SR 15.43

# Innovative Methods and Environments for Learning and Research

Chair

Yair Koren Maimon

Enhancing Anatomy Learning with Mixed Reality: Effects on Performance, Cognitive Load and control (Poster Presentation)

Milana Dzhamalova (Co-Author); Amaël Arguel (University of Toulouse); NATHALIE HUET (University of Toulouse 2)

No news is good news: Testing Modality and Redundancy in Immersive Augmented Reality (Poster Presentation)

Vito Candido (Presenting Author); Alberto A.P. Cattaneo (Co-Author); Dominik Petko (Co-Author)

Enhancing the Effectiveness of Written Explanations through Conversational Formats (Poster Presentation)

Takaaki Ito (Presenting Author)

Impact of AI-generated self-regulation prompts on learning outcomes, self-regulation and motivation (Poster Presentation)

Patrick Albus (Presenting Author); Tina Seufert (Co-Author)

Museal VR-Replicas: Effects on Art-Experience and Learning (Poster Presentation) Maximilian Kenzo Molitor (Presenting Author); Jens Maiero (Co-Author); Laura Peiffer-Siebert (Co-Author); Birgit Brucker (Co-Author); Peter Gerjets (Co-Author)

The Brain-Based Learning Processes Underlying the Spatial Continuity Effect: An fNIRS Study (Poster Presentation)

Fuxing Wang (Presenting Author); Wanling Zhu (Co-Author); Richard Mayer (Co-Author); Tao Liu (Co-Author)

Session M 27 08:30–10:00 Location: HS 03.01

#### Realizing Potentials - Global Challenges in Education Research

Chair

Ingrid Gogolin
Speakers

Icy Fresno Anabo Maria Padrós Cuxart Realizing Potentials - Global Challenges in Education Research (Invited Symposium)

Leaving early from education and training in Europe: Turning challenges to opportunities for all children to thrive (Single Paper)

Rocío García Carrión (Presenting Author)

Dealing with linguistic diversity - unlock and realize the literacy potential of every individual learner (Single Paper)

Ingrid Gogolin (Presenting Author)

Educational equity in Europe. 25 years of development in European primary school systems through the lens of different theories of educational justice (Single Paper)

Heike Wendt

Session M 28 08:30–10:00 Location: HS 15.14

# AI and Teacher Competence

#### Chair

Joanna Anderson

Artificial intelligence in education: teachers' trust, self-efficacy, anxiety and task value (Single Paper)

Fien Depaepe (Presenting Author); Rani Van Schoors (Co-Author); Stefanie Vanbecelaere (Co-Author); Mutlu Cukurova (Co-Author)

Modeling and measuring teachers' AI competencies - Findings from a systematic literature review (Single Paper)

Michel Meß (Presenting Author); Josef Guggemos (Co-Author); Stanley Schilling-Friedemann (Co-Author); Roland Happ (Co-Author)

Exploring Teacher Dashboard Feedback in Lesson Phases: Feedback Types and Teacher Characteristics (Single Paper)

Manel van Kessel (Presenting Author); Carolien Knoop-van Campen (Co-Author); Mario de Jonge (Co-Author); Inge Molenaar (Co-Author); Nadira Saab (Co-Author)

Generative AI Competencies for Higher Education Lecturers – Do we Need a New Framework? (Single Paper)

Isabelle Fabienne Geppert (Presenting Author); Kerstin Denecke (Co-Author); Daniel Reichenpfader (Co-Author); André Klostermann (Co-Author)

Session M 29 08:30–10:00 Location: HS 15.06

Motivation, emotion and creativity in lifelong learning

Chair

David Putwain

Exploring Contextual Factors Impacting Self-Determination in Portuguese Adults with Cerebral Palsy (Single Paper)

André Oliveira (Presenting Author); Armanda Pereira (Co-Author); Ana Guimarães (Co-Author); Maria Carneiro (Co-Author); Pedro Rosário (Co-Author)

A MULTIDIMENSIONAL PERSPECTIVE ON LOW-EDUCATED ADULTS' MOTIVATION FOR SECOND-CHANCE EDUCATION (Single Paper)

Bea Mertens (Presenting Author); Katrien Cuyvers (Co-Author); Sven De Maeyer (Co-Author); Vincent Donche (Co-Author)

Emotional valence and arousal in remote, hybrid, and face-to-face work interaction situations (Single Paper)

Ilmari Puhakka (Presenting Author); Petri Nokelainen (Co-Author); Eija Lehtonen (Co-Author)

Learning to Become a Teacher for Creativity: How to Set Up Professional Creativity Coaching (Single Paper)

Rene Brauer (Presenting Author); Jarrod Ormiston (Co-Author); Simon Beausaert (Maastricht University)

Coffee Break 10:00–10:30

Coffee Break

**KEYNOTES - PART 2 01** 

10:30-12:00

Location: Aula

Active Playful Learning: Where the Science of Learning Meets Education

Chair

Jo Van Herwegen

Active Playful Learning: Where the Science of Learning Meets Education (Keynote)

Kathy Hirsh-Pasek (Presenting Author)

**KEYNOTES - PART 2 02** 

10:30-12:00

Location: HS 62.01 Alumni-Hörsaal

Thinking Twice About Reciprocal Effects Between Dynamic Constructs in Learning and Instruction

Chair

Raija Hämäläinen

Thinking Twice About Reciprocal Effects Between Dynamic Constructs in Learning

and Instruction (Keynote)

Fernando NUNEZ-REGUEIRO (Presenting Author)

KEYNOTES - PART 2 03

10:30-12:00

Location: HS 12.11

On Creative Minds and Brains: Insights, Implications and Challenges for Education

Chair

On Creative Minds and Brains: Insights, Implications and Challenges for Education

(Keynote)

Mathias Benedek (Presenting Author)

Roland H. Grabner

Session N 01 12:15–13:45 Location: HS 03.01

## Effects of Instructional Materials on Learning and Motivaton

Chair Ian Thacker Effects of pedagogical agents' age and gender on learners' identification, interest, and learning (Single Paper)

Sören Traulsen (Presenting Author)

Exploring the effects of personalization and signaling in a text adventure educational video game (Single Paper)

Kevin Birkefeld (Presenting Author); Lena Baumann (Co-Author); Steve Nebel (Co-Author); Maik Beege (Co-Author); Pia Spangenberger (Co-Author); Mandy Dörre (Co-Author); Yasmin Rabending (Co-Author)

Mathematics textbooks as a potential implemented curriculum: A systematic review (Single Paper)

Constanze Koschwitz (Presenting Author); Ann-Katrin van den Ham (Co-Author)

But WHY am I confused? Sources of emotions shaping the relations with cognitive load and performance (Single Paper)

Valentin Riemer (Presenting Author)

Session N 02 12:15–13:45 Location: HS 15.05

#### Moral, Social and Emotional Aspects in Development and Learning

Chair

Lara van Peppen

Under the microscope: The dynamics of moral & social development and learning (Single Paper)

Minkang Kim (Presenting Author); Li Li (Co-Author); Kwan Yiu Yoyo Wu (Co-Author)

The development of math anxiety from fourth to fifth grade as a function of control-value profiles (Single Paper)

Anna Tapola (Presenting Author); Johan Korhonen (Co-Author); Pinja Tähti (Co-Author); Riika Mononen (Co-Author)

Moral self of children with and without special educational needs - Analyzing measurement invariance  $(Single\ Paper)$ 

Jessica Wilke (Presenting Author); Jule Eilts (Co-Author); Tatjana Leidig (Co-Author); Tijs Bolz (Co-Author)

How to exist with a loss? Grieving children in the secular age (Single Paper) Saila Poulter (Presenting Author)

# Session N 03 12:15–13:45 Location: HS 02.23

#### Perspectives on Early Learning and Development

#### Chair

Vanessa Pieper

Dialing In: How Mothers' Phone Use Relates to Child Language Development (Single Paper)

JUNYI YANG (Presenting Author); Monica melby-lervåg (Co-Author); Øistein Anmarkrud (Co-Author)

Practitioner Reflections on their Intended Outcomes for Early Years Mathematics Learning (Single Paper)

Katie Seabridge (Presenting Author); Natalie Flint (Co-Author); Tim Jay (Co-Author); Catherine Gripton (Co-Author); Colin Foster (Co-Author)

"The younger you are, the easier you learn!" The parental perspective on the onset of learning EFL (Single Paper)

Raphaela Porsch (Presenting Author)

Measuring Optimism in Children: Validation of the Norwegian Version of the Future Expectation Task (Single Paper)

Narges Ranginkaman (Presenting Author); Dieuwer ten Braak (Co-Author); Ingunn Størksen (Co-Author)

Session N 04 12:15-13:45 Location: HS 05.12

# Student Psychological Needs and Teacher Support

#### Chair

Alina Lira Lorca

Effects of teacher judgements on students' mathematical ability and motivation (Single Paper)

Tanja Aistleitner (Presenting Author); Justine Stang-Rabrig (Co-Author); Christoph Helm (Co-Author)

Situational Fluctuations in Adolescents' Lesson-Specific Experiences of Relatedness and Competence (Single Paper)

Satu Koivuhovi (Presenting Author); Lars-Erik Malmberg (Co-Author); Reito Visajaani Salonen (Co-Author); Risto Hotulainen (Co-Author)

The Role of Parental and Teacher Need-support in Students' Successful Transition from Primary School (Single Paper)

Lauren Renshaw (Presenting Author); Rebecca Collie (Co-Author); Andrew Martin (Co-Author)

Psychological need satisfaction in physical education: Universalism without uniformity? (Single Paper)

Anne de Bruijn (Presenting Author); Remo Mombarg (Co-Author); Esther Hartman (Co-Author); Anneke Timmermans (Co-Author)

# Session N 05 12:15–13:45 Location: HS 44.11

#### Multifaceted influences in learning environments

#### Chair

Friederike Carlotta Grabowski

Eco-Centric Dreams, Anthropocentric Realities: Rethinking Environmental Education for Young Minds (Single Paper)

Feyza Dogan (Presenting Author)

The Amsterdam Model of Learning Environments (AMOLE): A Theoretical Framework (Single Paper)

Michelle Laux (Presenting Author); Kai Schuster (Co-Author); Maik Beege (Co-Author)

Exploring the Relations between Five-year-old Children's Skills, Parental Beliefs and Behaviours (Single Paper)

Anne-Mai Meesak (Presenting Author); Dmitri Rozgonjuk (Co-Author); Tiia Õun (Co-Author); Eve Kikas (Co-Author)

Investigating Spatial Understanding and Social Dynamics in Playground Games: A Space Syntax Approach (Single Paper)

Mine Sak Acur (Presenting Author); Edward Baines (Co-Author); Kerstin Sailer (Co-Author)

Dynamics of Motor Skill Learning in American and Israeli Toddlers With Varied Language Proficiency (Single Paper)

Esther Adi-Japha (Presenting Author); Mona Sharon Julius (Co-Author); Shari DeVeney (Co-Author)

Session N 06 12:15–13:45 Location: HS 15.13

#### **Engagement and Learning In Different Conditions**

#### Chair

Emma Burns

The role of paired students' sequential actions in the productivity of collaborative problem solving (Single Paper)

Shupin Li (Presenting Author); Johanna Pöysä-Tarhonen (Co-Author); Päivi Häkkinen (Co-Author)

Quantitatively assessing engagement on short timescales from video data: a validation study (Single Paper)

Ellen Egeland Flø (Presenting Author)

EARLI: Student teachers' opportunities to learn while in field practice: A latent class analysis (Single Paper)

Tine Nielsen (Presenting Author); Svend Kreiner (Co-Author)

Dissociation of Information and its Uncertainty Over Time (Single Paper)

Manuela Glaser (Presenting Author); Stefanie Aberle (Co-Author)

# Session N 07 12:15–13:45 Location: SZ 15.21

#### Cognitive and Affective Engagement

## Chair

Annelie Lorber

How Does Thematic Proximity Influence the Evaluation and Processing of Seductive Details? (Single Paper)

Lisa Bender (Presenting Author); Alexander Renkl (Co-Author); Tino Endres (Co-Author); Ellen Kok (Co-Author); Alexander Eitel (Co-Author)

What Makes Diagnosing Cognitive Engagement Challenging? Analyzing Diagnostic Skills in a Simulation (Single Paper)

Meral Roeben (Presenting Author); Florian Schultz-Pernice (Co-Author); Johanna Vejvoda (Co-Author); Michael Sailer (Co-Author); Christiane Lütge (Co-Author); Frank Fischer (Co-Author); Nicole Heitzmann (Co-Author)

Fit for VUCA: Generative drawing enhances complex problem solving in listening comprehension (Single Paper)

Anita Radi-Pentz (Presenting Author); Tina Seufert (Co-Author)

Understanding How Teachers' Beliefs and Collective Culture relate to Grade Retention Decisions (Single Paper)

Natalie Nóbrega Santos (Presenting Author); Joana Pipa (Co-Author); Vera Monteiro (Co-Author); Francisco Peixoto (Co-Author)

Session N 08 12:15–13:45 Location: HS 05.01 Experimentierhörsaal

# Effects of Relationships in Early Childhood and Special Education

#### Chair

Cau Marine

Narrowing SES Reading Achievement Gap: Self-Control and Teacher-Student Closeness (Single Paper)

Jing Huang (Presenting Author)

Quality in Inclusive-Digital Primary School Teaching: A Focus on Individual Cognitive Activation (Single Paper)

Julia Warmdt (Presenting Author); Henrik Frisch (Co-Author); Sanna Pohlmann-Rother (Co-Author); Christoph Ratz (Co-Author)

Self-Efficacy and Parent-Teacher Relationship throughout the Placement Process in special education  $({\rm Single~Paper})$ 

Bilha Paryente (Presenting Author)

Supporting Children's Peer Play Development in Early Childhood Education and Care (Single Paper)

Tiril Wilhelmsen (Presenting Author); Robert Coplan (Co-Author); Tone Ovati (Co-Author); Elise Øksendal (Co-Author); Ratib Lekhal (Co-Author); Veslemøy Rydland (University of Oslo)

#### Session N 09 12:15–13:45 Location: HS 15.11

#### **Towards Inclusive School Environments**

#### Chair

Kari-Anne Bottegård Næss

Teachers' Self-Efficacy Beliefs and Attitudes concerning Inclusive Education (Single Paper)

Pauline Finke (Presenting Author); Jan Roland Schulze (Co-Author); Frank Hellmich (Co-Author)

Does Inclusive School Environment Influence Students' Social-Emotional Learning and Achievement? (Single Paper)

Jiaying Chen (Presenting Author); Norman Mendoza (Co-Author); Yuhan Xiong (Co-Author); Le-Xuan Zhang (Co-Author); Zi Yan (Co-Author)

Biased teacher expectations and student nationality clusters (Single Paper)

Ariana Garrote (Presenting Author); Markus Neuenschwander (Co-Author)

Divided by Language: A Review of Teacher Perspectives in Segregated Language Learning Settings (Single Paper)

Flora Woltran (Presenting Author); Susanne Schwab (Co-Author)

Session N 10 12:15–13:45 Location: HS 15.12

#### Programs, Academic Practices and Assessment

#### Chair

Ilona Friso-van den Bos

Culturally responsive assessment practices: Learning from the Pacific (Single Paper) Frances Edwards (Presenting Author); Mata Aumata (Co-Author)

Twenty-first century skills in psychology master programs: A curriculum inquiry in the Netherlands (Single Paper)

Ayşegül Karaca-Atik (Presenting Author); Marieke Meeuwisse (Co-Author); Marjan Gorgievski (Co-Author); Guus Smeets (Co-Author)

Teachers' Inclusive Core Practices and All Students' Perspectives (Single Paper) Jana Obrovská (Presenting Author); Petr Svojanovský (Co-Author); Jana Navrátilová (Co-Author)

Reflections on working in the ecology of the university: Early career academics' experiences (Single Paper)

Emma Cunningham (Presenting Author); Andrew Doyle (Co-Author); Janina Suppers (Co-Author); Brent Wagner (Co-Author)

Understanding Early Career Academics Learning to Experience Teaching in HE through Poetic Work. (Single Paper)

Felipe Sanchez (Presenting Author)

# Session N 11 12:15–13:45 Location: HS 11.02

#### Digital Applications for Students' Wellbeing and Learning

Chair

Fiona Boylan

Promoting Student Well-Being: Insights from a Mobile-Enabled Positive Education Intervention (Single Paper)

Stefanie Chye (Presenting Author); Yvonne Seng (Co-Author); Isabella Wong (Co-Author); Ying Kiat Tan (Co-Author); May Li Lim (Co-Author); Wei Yan Low (Co-Author)

Finding the balance: The effects of parental communication on teacher resilience outcomes. (Single Paper)

Carrie Adamson (Presenting Author); Steph Ainsworth (Co-Author); Jeremy Oldfield (Co-Author)

Effects by an App-Delivered Mindfulness-Based Stress Reduction Course on Student Mental Health (Single Paper)

Nikolai Zinke (Presenting Author); Anne Ritz (Co-Author); Nico Bunzeck (Co-Author)

Leveraging Metaverse Platforms for Enhanced Gameful Experiences and Entrepreneurial Learning? (Single Paper)

Anna Wenzel (Presenting Author); Jan-Martin Geiger (Co-Author); Andreas Liening (Co-Author)

Session N 12 12:15-13:45 Location: HS 25.11

## Impact of School, Parent and Individual Characteristics

Chair

Sabine Manzel

Children's and Adolescents' Engagement in Early Childhood Education and School – Umbrella Review (Single Paper)

Sanna Ulmanen (Presenting Author); Liyuan E (Co-Author); Kirsi Pyhältö (Co-Author); Jaakko Hilppö (Co-Author); Auli Toom (Co-Author)

Exploring the impact of growth mindset and bicultural identity on students' Chinese L2 engagement (Single Paper)

Wanru Pang (Presenting Author); Yuan Yao (Co-Author); Xinhua Zhu (Co-Author); Siyu Zhu (Co-Author)

Role of Mathematical Creativity-Ethnomathematics: Attitude, Identity, and Parental Education Impact  $(Single\ Paper)$ 

Suherman Suherman (Presenting Author); Tibor Vidákovich (Co-Author)

School-level influences on equal opportunities: A review of the interplay among key factors (Single Paper)

Katrien Hermans (Presenting Author); Liesbet Saenen (Co-Author); Patrizia Zanoni (Co-Author); Elke Emmers (Co-Author); Katrien Struyven (Co-Author)

# Session N 13 12:15–13:45 Location: HS 12.01

#### Cognitive Functioning and Academic Performance in Various Domains

#### Speaker

Anushari Wathiyage Don

Does the context-dependent memory effect also apply to fonts in text-based learning? (Single Paper)

Felix Krieglstein (Presenting Author); Felicia Meusel (Co-Author); Nadine Scheller (Co-Author); Manuel Schmitz (Co-Author); Lukas Wesenberg (Co-Author); Günter Daniel Rey (Co-Author); Sebastian Jansen (Technische Universität Chemnitz)

Prospective teachers' learning about teaching early arithmetic from a learning study (Single Paper)

Angelika Kullberg (Presenting Author); Pernilla Mårtensson (Co-Author); Rimma Nyman (Co-Author)

Reading and Evaluating Research: Productive Failure vs. Instruction-First in University Context  $({\rm Single~Paper})$ 

Christine Johannes (Presenting Author); Astrid Haase (Co-Author); Pauline Blanke (Co-Author)

Session N 14 12:15–13:45 Location: HS 01.22

#### Instructional design for collaborative learning

#### Chair

Katja Upadyaya

Sitting or standing? - How body postures affect learning and retrieval performance (Single Paper)

Camilla Illy (Presenting Author); Tino Endres (Co-Author); Tanja Habermeyer (Co-Author); Nadine Scheller (Co-Author); Sascha Schneider (Co-Author)

Effects of collaborative learning from dynamic multimedia - A meta-analysis (Single Paper)

Laura Schultze (Presenting Author); Nicoletta Bürger (Co-Author); Christof Wecker (Co-Author)

Active learning model for teaching applied ethics (Single Paper)

Camila Barahona (Presenting Author); Gabriela Arriagada-Bruneau (Co-Author); María Fernanda Rodríguez (Co-Author)

Enhancing Pre-Service Teachers' Professional Vision: Does Problem-Solving Prior to Instruction Work? (Single Paper)

Ingo Kollar (Presenting Author); Christina Wekerle (Co-Author); Lara Tar (Co-Author); Özün Keskin (Co-Author)

Session N 15 12:15–13:45 Location: HS 15.02

#### Language, Reading, Writing and Comprehension

#### Chair

Ora Oudgenoeg-Paz

Linking Reading Amount and Text Genres to Multimodal Reading: The Mediating Role of Self-Beliefs (Single Paper)

Siyu Zhu (Presenting Author); Tiantian Li (Co-Author); Xinhua Zhu (Co-Author)

Print and digital reading habits: longitudinal paths with reading motivation and comprehension (Single Paper)

Lidia Altamura García (Presenting Author); Johannes Naumann (Co-Author); Cristina Vargas Pecino (Co-Author); Ladislao Salmerón (Co-Author); Amelia Mañá (University of Valencia)

# Session N 16 12:15–13:45 Location: HS 02.11

## Learning Strategies Across Contexts: From Classrooms to Clinical Settings

Chair

Yousef Alardhi

Operating room nurses' perceptions of teamwork and learning in the operating room-qualitative study. (Single Paper)

Irini Antoniadou (Presenting Author); Sebastiaan Meijer (Co-Author); Janet Mattsson (Co-Author); Karin Pukk-Härenstam (Co-Author); Gunilla Björling (Co-Author)

Exploring students' use of ChatGPT as a personal assistant for writing and learning (Single Paper)

Sabine Seufert (Presenting Author); Lukas Spirgi (Co-Author)

Self-Efficacy, Strategy Use, and Multimodal Reading across Emotional Profiles in Primary Students (Single Paper)

Jialin Li (Presenting Author); Yiwen Sun (Co-Author); Xinhua Zhu (Co-Author); Siyu Zhu (Co-Author)

Embedding explicit study strategy instruction into higher education classrooms: A TPD programme  $(Single\ Paper)$ 

Tine Hoof (Presenting Author); Kim Bellens (Co-Author); Pieter Verachtert (Co-Author); Paul Kirschner (Co-Author); Gino Camp (Co-Author)

Session N 17 12:15–13:45 Location: HS 46.01

# Perspectives on Mathematics and Numeracy

Chair

Hamide Merve Dogancay

(Non-)Resonant relationships – distinguishing modes of relating to mathematics via eidetic analysis (Single Paper)

Kata Sebök (Presenting Author)

Change and Stability of Number Processing and Arithmetic Fluency from Grades 3 to 9 (Single Paper)

Heidi Hellstrand (Presenting Author); Santeri Holopainen (Co-Author); Johan Korhonen (Co-Author); Pekka Räsänen (Co-Author); Anu Laine (Co-Author); Pirjo Aunio (Co-Author)

Testing Theoretical Explanations for Why Math Anxiety Predicts Poor Math Performance (Single Paper)

Ian Lyons (Presenting Author); Cynthia Fioriti (Co-Author); Erika Ikeda (Co-Author); Lucas Miller (Co-Author); Michael Slipenkyj (Co-Author)

A Meta-Analysis of the Mathematical Skills in Children with Developmental Language Disorder (Single Paper)

Anne Mari Høgetveit (Presenting Author); Malin Dalby Silkstone (Co-Author); Monica melbylervåg (Co-Author); Enrica Donolato (1. Department of General Psychology)

Session N 18 12:15–13:45 Location: HS 15.14

# Learner Perspectives Across Age Groups and Contexts

Chair

Benjamin Lam

Exploring Seniors' Perceptions, Barriers, and Supports in Asynchronous E-Learning (Single Paper)

David Pellerin (Presenting Author); Ana Flavia De Olivera Batista (Co-Author)

Inquiring with children to design accessible extracurricular learning (Single Paper) Sherridan Emery (Co-Author); Becky Shelley (Co-Author); Jun Oshima (Co-Author); Aishah Bakhtiar (Shizuoka University; University of Tasmania)

Age, Gender, and Parental Mediation of Child Internet Usage: Links to Academic Self-Concept (Single Paper)

Susanne Kuger (Presenting Author); Sabine Düval (Co-Author); Lynda Sagrestano (Co-Author)

A Social Network Approach to Adolescents' Metacognition and Learning (Single Paper)

Mariette van Loon (Presenting Author); Lydia Laninga-Wijnen (Co-Author)

Session N 19 12:15–13:45 Location: HS 15.06

### Teaching in Diverse Classrooms

Chair

Claudia Neuendorf

Relationship building in European culturally diverse classrooms - a scoping review (Single Paper)

Leandra Ve Saskia Romey (Presenting Author); Ville Mankki (Co-Author); Eija Pakarinen (Co-Author); Sotiria Varis (Co-Author)

Beyond Niceness: Examining Classroom Culture, Power, and Inclusivity in a Progressive School (Single Paper)

Müge Olğun Baytaş (Presenting Author)

How the English Learner Label Influences Teacher Perceptions and Student Achievement (Single Paper)

Katharina Schnitzler (Presenting Author); Ilana Umansky (Co-Author); Hanna Dumont (Co-Author)

Teachers' teaching priorities in first grade (Single Paper)

Reidun Hoff-Jenssen (Presenting Author)

Session N 20 12:15–13:45 Location: SR 03.K1

# Cultural Aspects and Roles in Education

Chair

Eric Schoute

Navigating Roles and Emotions of Majority Educators in Indigenous and Minority Education (Single Paper)

Ella Mattila (Presenting Author)

The Impact of Reverse Mentoring on Developing Scientific Mindset and Research Skills (Single Paper)

Julia Raberger (Presenting Author); Konstantinos G aravelas (Co-Author); Kristin Weiherer (Co-Author); Dominik E. Froehlich (University of Vienna; University of Sustainability Vienna - Charlotte Fresenius University)

Individual and Flexible Learning Pathways in Teacher Education: Students and Lecturers Perspectives (Single Paper)

Anja Winkler (Presenting Author); Angela Aegerter (Presenting Author); Aline Loew (Co-Author); Sarah-Jane Conrad (Co-Author); Alessandra Kolb (PHBern)

Identity curation in intercultural learning: A Participatory Narrative Inquiry with Trainee Teachers (Single Paper)

Lingyi Chu (Presenting Author); Natalija Mazeikiene (Presenting Author)

Session N 21 12:15–13:45 Location: HS 02.21

# Teacher Knowledge, Practice and Perception

Speaker

Julian Brauchle

Student-centred learning in innovative learning environments (Part I): teachers played out practice (Single Paper)

Peter Bergström (Presenting Author); Annika Wiklund-Engblom (Co-Author); Maria Lindfors (Co-Author)

Student-centred learning in innovative learning environments (Part III): Students' perceptions (Single Paper)

Maria Lindfors (Presenting Author); Annika Wiklund-Engblom (Co-Author); Peter Bergström (Co-Author)

Teacher's use of instructional videos in mathematics education (Single Paper)

Timo Schaffitzel (Presenting Author); Lars Holzäpfel (Co-Author); Frank Reinhold (Co-Author); Maya Zastrow (Co-Author)

Across Domain Knowledge Integration Rating of pre-service teachers' knowledge integration from texts (Single Paper)

Anika Wäscher (Presenting Author); Pablo Pirnay-Dummer (Co-Author)

Session N 22 12:15–13:45 Location: HS 15.04

## Effectiveness in school teaching, testing and surveying

#### Chair

Madeleine Kingan

Digital literacy in secondary school: individual-level and classroom-level effects. (Single Paper)

Goan Booij (Presenting Author); Bieke Schreurs (Co-Author); Merlijn Karssen (Co-Author); Minh Hao Nguyen (Co-Author); Brenda Jansen (Co-Author); Andries van der Ark (Co-Author); Alexander Krepel (Kohnstamm Institute)

Construction of instructionally sensitive items: Role of item properties for math items' sensitivity (Single Paper)

Alexander Naumann (Presenting Author); Stephan Schönenberger (Co-Author); Stephanie Leininger (Co-Author); Marit List (Co-Author); Jan Hochweber (Co-Author); Johannes Hartig (Co-Author)

Sub-Optimal Responses in Student Surveys: Implications For Learning Environment Data Quality (Single Paper)

Jonathan Schweig (Presenting Author)

The Role of School Effectiveness and Trust in Mitigating Teacher's Load (Single Paper)

Risto Hotulainen (Presenting Author); Tuulia Ortner (Co-Author); Sanna Oinas (Co-Author); Raisa Carpelan (Co-Author); Suvi Kanerva (Co-Author); Lauri Heikonen (Co-Author); Eelis Mikkola (Co-Author)

Session N 23 Location: Festsaal

### Teacher Practices and Quality

#### Chair

Niklas Obergassel

Observer ratings of math's classrooms—What role does the professional background of the raters play? (Single Paper)

Linn Hansen (Presenting Author); Marita Friesen (Co-Author); Anika Dreher (Co-Author)

From 'obedient critics' to 'immunes': A spectrum of teacher agency in a national assessment reform (Single Paper)

Laura Ketonen (Presenting Author); Juuso Henrik Nieminen (Co-Author)

How is Observers' Gaze Related to Their Ratings of Teaching Quality in Classroom Observations? (Single Paper)

Tosca Daltoè (Presenting Author); Tobias Appel (Co-Author); Philipp Stark (Co-Author); Birgit Brucker (Co-Author); Anika Dreher (Co-Author); Benjamin Fauth (Co-Author); Marita Friesen (Co-Author); Peter Gerjets (Co-Author); Linn Hansen (Co-Author); Ulrich Trautwein (Co-Author); Richard Goellner (Co-Author)

Observing teacher practices for creating Powerful Learning Environments in Pre-Vocational Education (Single Paper)

Michiel Wils (Presenting Author); Heline Van Peteghem (Co-Author); Charlotte Arnou (Co-Author); Tim Surma (Co-Author); Nadine Engels (Co-Author); Machteld Vandecandelaere (Co-Author); Ingeborg Placklé (Co-Author)

# Session N 24 12:15–13:45 Location: HS 01.15

## Core Practices in Teaching and Teacher Education

Chair

Isabel Raemdonck

Developing productive conversations through video-stimulated reflections in Teacher Education (Single Paper)

Hege Myklebust (Presenting Author); Gry Anette Tuset (Presenting Author); Vigdis Vangsnes (Presenting Author); Michel Cabot (Co-Author)

Simulation as approximation and modeling of classroom dialogue: Core practices in teacher education (Single Paper)

Susi Klaß (Presenting Author); Alexander Groeschner (Friedrich Schiller University Jena)

Effects of Graphical Representations on Student-Teachers' Interpretation of Student Progress Data (Single Paper)

Erika Lunowa (Presenting Author); Sarah Bez (Co-Author); Martin J. Tomasik (Co-Author); Samuel Merk (Co-Author)

Primary and secondary science teacher students' self-efficacy in teaching science via inquiry (Single Paper)

Tomi Jaakkola (Presenting Author); Koen Veermans (Co-Author); Antti Lehtinen (Co-Author)

Session N 25 12:15–13:45 Location: HS 11.01

### Navigating Learning in Secondary Schools

Chair

Marcus Samuelsson

The role of students' situational engagement on activity emotions during physics classes (Single Paper)

Pei-Hsin Li (Presenting Author); Elisa Vilhunen (Co-Author); Veli-Matti Vesterinen (Co-Author); Katariina Salmela-Aro (Co-Author)

Self-regulated learning in different blended learning environments – a longitudinal study (Single Paper)

Anne-Madeleine Kraft (Presenting Author); Heike Schaumburg (Presenting Author); Thomas Koinzer (Co-Author); Björn Kröske (Co-Author)

Linking Strategy Repertoires to Rational Number Understanding: Insights from Secondary Learners (Single Paper)

Christina Imp (Presenting Author)

 $\label{eq:Good text quality despite deficient transcription skills - An analysis of double dissociation (Single Paper)$ 

Rebecca Maria Kreutz (Presenting Author); Julie Philippek (Co-Author); Ann-Kathrin Hennes (Co-Author); Barbara Schmidt (Co-Author); Alfred Schabmann (Co-Author)

Session N 26 12:15–13:45 Location: HS 01.14

## Multiple Factors Shaping Students' Motivation

Chair

Ioanna Christolouka

Not my type – Do career choice motives depend on the type of school students want to teach at? (Single Paper)

Lara Dahlke (Presenting Author); Fani Lauermann (Co-Author); Sylvia Rahn (Co-Author)

Impaired Internalization: Understanding the Impostor Phenomenon in Higher Education (Single Paper)

Thomas Martens (Presenting Author); Andrea Schwieter (Co-Author)

Strategy-based motivation, quality of strategy use, and reading comprehension in mathematics (Single Paper)

Stanislaw Schukajlow (Presenting Author); Alexander Westhölter (Co-Author); Pia Gödecke (Co-Author)

The Role of a Digital Educational Platform in Shaping Students' Motivational Profiles (Single Paper)

Tanya Chichekian (Presenting Author)

Session N 27 12:15–13:45 Location: HS 02.01

## Shaping Teachers: Quality, Leadership and Motivation

Chair

Daniel Patrick Balestrini

A study on the reciprocal relations of teachers' technology-related motivation and knowledge (Single Paper)

Armin Fabian (Presenting Author); Franziska Tschönhens (Co-Author); Ronny Scherer (Co-Author); Tim Fütterer (Co-Author)

Trajectories of Teacher Enthusiasm in Academic and Practical Phases of Early Teacher Education (Single Paper)

Christin Lotz (Presenting Author); Patrick Hawlitschek (Co-Author); Anne Deiglmayr (Co-Author)

The role of school principals in the context of teacher education (Single Paper) Mirjam Kocher (Presenting Author); Anna Locher (Co-Author)

 $\label{lem:control} \begin{tabular}{lll} Wideo-Based Comparison of General and GSL-Specific Instructional Quality Assessment in GSL Courses (Single Paper) \\ \end{tabular}$ 

Moritz Sahlender (Presenting Author); Stefanie Bredthauer (Co-Author); Josef Schrader (Co-Author); Hannes Schröter (Co-Author); Fani Lauermann (University of Bonn)

Session N 28 12:15–13:45 Location: SR 03.01

## Reading and Interventions for Reading Disorders

# Chair Stoo Sepp

Dynamics of letter-speech sound integration and word reading fluency in dyslexia intervention (Single Paper)

Cara Verwimp (Presenting Author); Jesse Lemsom (Co-Author); Sjoerdje Bruinsma (Co-Author); Patrick Snellings (Co-Author); Reinout Wiers (Co-Author); Jurgen Tijms (Co-Author)

Computer-Based Treatments for Italian Children with Dyslexia: An Ecological Study on Secondary Data (Single Paper)

Eleonora Pizzigallo (Presenting Author); Maria Giulia Cataldo (Co-Author); Ottaviano Martinelli (Co-Author); Elisabetta Reali (Co-Author); Elena Ripamonti (Co-Author); Letizia Stella (Co-Author); Enrico Toffalini (Co-Author); Valeria Villa (Co-Author); Davide Villani (Co-Author); Barbara Carretti (Co-Author)

Undergraduate Reading in the Age of GenAI (Single Paper)

Thomas Corbin (Presenting Author); Margaret Bearman (Co-Author); Jack Walton (Co-Author)

Data Collection Challenges During COVID-19: PIRLS 2021 Sample Composition in the Dinaric Region  $({\rm Single~Paper})$ 

Duygu Savaşcı-Smith (Presenting Author); John Jerrim (Co-Author)

<u>Session N 29</u> 12:15–13:45 Location: HS 11.03

# Social support, collaboration, learning and psychological functioning

#### Chair

Tiina Törmänen

Success and Failure in Collaborative Diagnostic Reasoning from a Process Perspective (Single Paper)

Laura Brandl (Presenting Author); Matthias Stadler (Co-Author); Constanze Richters (Co-Author); Ralf Schmidmaier (Co-Author); Martin Fischer (Co-Author); Frank Fischer (Co-Author)

On storylines, positions and meta-level shifts in mathematics peer learning (Single Paper)

Naama Ben-Dor (Presenting Author)

Cognitive Stress Reappraisal: A Replication of Jamieson's Situational Intervention in Middle School (Single Paper)

Enrico Toffalini (Co-Author); Sara Caviola (Co-Author); Alice Masi (University of Padova)

Longitudinal Profiles of Social Support and Their Links to Academic and Psychological Functioning (Single Paper)

Daria Khanolainen (Presenting Author); Vilija Hiltunen (Co-Author); Minna Torppa (Co-Author); Asko Tolvanen (Co-Author); Noona Kiuru (Co-Author); Kaisa Aunola (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author); Anna-Maija Poikkeus (Co-Author); Jenni Ruotsalainen (Co-Author); Katariina Salmela-Aro (Co-Author); Ingrid Schoon (Co-Author); Kati Vasalampi (Co-Author)

Session O 01 14:00–15:30 Location: HS 01.22

## Texts, Videos and Diagrams in Learning

Speaker Orna Levin Design Principles for Promoting Self-Constructed Diagrammatic Competency in Primary School Children (Single Paper)

Yuri Uesaka (Presenting Author)

Illustrations and mathematical word problem-solving: A systematic review (Single Paper)

Terhi Vessonen (Presenting Author); Heidi Hellstrand (Co-Author); Pirjo Aunio (Co-Author); Anu Laine (Co-Author)

Texts vs. videos in primary education: Retrieval, retention, and the influence of reading skills  $(Single\ Paper)$ 

Mikko Haavisto (Presenting Author); Janne Lepola (Co-Author); Tomi Jaakkola (Co-Author)

Systems Thinking in Environmental Chemistry Textbooks: A Systemic Functional Linguistics Analysis (Single Paper)

Ka Lok Cheng (Presenting Author)

Session O 02 14:00–15:30 Location: HS 25.11

#### Resilience in diverse learning contexts

Chair

What strengthens day nursery teams? (Single Paper)

Raisa Carpelan Monika Wertfein (Presenting Author)

How predictors of teacher resilience are mediated by factors within and across ecological systems (Single Paper)

Nikki Casey (Presenting Author); Steph Ainsworth (Co-Author); Carrie Adamson (Co-Author); Jeremy Oldfield (Co-Author); Samantha Davidson (Co-Author)

Assessing the relative contribution of individual and contextual factors to teacher resilience (Single Paper)

Samantha Davidson (Presenting Author); Steph Ainsworth (Co-Author); Carrie Adamson (Co-Author); Jeremy Oldfield (Co-Author); Nikki Casey (Co-Author)

Anxiety and self-esteem as predictors and consequences of cyber-victimization in preadolescence  $({\rm Single~Paper})$ 

Trinidad Garcia (Presenting Author); David Álvarez-García (Co-Author); Lucy Betts (Co-Author)

Session O 03 14:00–15:30 Location: HS 15.05

# Assessment Methods of Student Performance and Teaching Practices

Chair

Anne Suryani

Performance-based simulations to monitor core teaching practices in Teacher Education (Single Paper)

Magdalena Müller (Presenting Author); Veronica Santelices (Co-Author); Edgar Valencia (Co-Author); Francisco Rojas (Co-Author)

Relationships Between Metacognitive Judgments, Self-Report Measures of Metacognition and Performance (Single Paper)

Peter Seban (Presenting Author); Radovan Sikl (Co-Author); Kamila Urban (Co-Author)

Multiliteracies Assessment for EFL Teacher Education: Development and Validation (Single Paper)

Salim Nabhan (Presenting Author); Anita Habók (Co-Author)

Session O 04 14:00–15:30 Location: HS 46.01

# Quality Education in Inclusive and Differentiated Classrooms

#### Chair

Daniela Decker

Teacher Characteristics and Instructional Quality: A Meta-Analysis Based on the COACTIV Model (Single Paper)

Nicoletta Bürger (Presenting Author); Katharina Engelmann (Co-Author); Laura Schultze (Co-Author); Marvin Schlamelcher (Co-Author); Christof Wecker (Co-Author)

The impact of summer bridge programs for first-generation students: A field experiment (Single Paper)

Izaak Dekker (Presenting Author); L. de Coninck (Co-Author); Felicitas Biwer (Co-Author); Niklas Wenzel (Co-Author); Sanne van Herpen (Co-Author); Tieme Janssen (Co-Author); Bonne Zijlstra (Co-Author)

Ability, Quality and Effectiveness: Teacher Profiles and Differentiated Instruction (Single Paper)

Marcela Pozas (Presenting Author); Verena Letzel-Alt (Co-Author)

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Sérgio Gaitas (Presenting Author); Tiago Sarabando (Co-Author); Catarina Alves (Co-Author); Margarida Alves Martins (Co-Author); Guilherme Leite (Co-Author); Ricardo Laranjeira (Co-Author)

Session O 05 14:00–15:30 Location: HS 15.12

# Social and Motivational Aspects In Teaching and Studying

#### Chair

Leanne Fray

Relevance of Efficacy and Personal Practices for Teaching about Sustainability: A Network Analysis (Single Paper)

Martin Daumiller (Presenting Author); Melanie V. Keller (Co-Author); Markus Dresel (Co-Author)

How student's motivational knowledge relates to regulation strategies in collaborative learning (Single Paper)

Emma Lehtoaho (Presenting Author); Tiina Törmänen (Co-Author); Hanna Jarvenoja (Co-Author); Aishah Bakhtiar (Shizuoka University; University of Tasmania)

Psychological Need Satisfaction and Motivation for Learning Among Inmates (Single Paper)

Meira nahshon (Presenting Author); Idit Katz (Co-Author)

Socio-Motivational Mechanisms that Support Girls' Intentions to Study Advanced STEM Subjects (Single Paper)

Emma Burns (Presenting Author); Penny Van Bergen (Co-Author); Katrina Thorvaldson (Co-Author)

Session O 06 14:00–15:30 Location: HS 02.11

## Multimedia Materials and Instructional Design

Chair

Verena Dresen

Redundancy Reconsidered: Effects of Modal and Codal Redundancy on Learning and Cognitive Load (Single Paper)

Melanie Trypke (Presenting Author); Ferdinand Stebner (Co-Author); Joachim Wirth (Co-Author)

Retrieval Practice in the Wild: Comparing Multiple-Choice Formats on a Children's TV Gaming Site (Single Paper)

Cyril Brom (Presenting Author); Gesa van den Broek (Co-Author); Filip Děchtěrenko (Co-Author); Kristina Volná (Co-Author); Tamara Van Gog (Co-Author)

Instructional Design Elements to Support Family Interactions During Informal Science Workshops (Single Paper)

Yahel Atsmon (Presenting Author); Orit Ben Zvi Assaraf (Co-Author)

Effects of Finger Tracing on Learning from Spatially Separated and Integrated Multimedia Materials (Single Paper)

Genmei Zuo (Presenting Author); Bjorn de Koning (Co-Author); Fred Paas (Co-Author)

Session O 07 14:00–15:30 Location: SR 03.01

#### Methods in Educational Research and Practice

Chair

Patrick Albus

Guidelines for holistic scoring in higher education (Single Paper)

Anne Lohuis (Presenting Author); Karin Gerritsen-van Leeuwenkamp (Co-Author); Desirée Joosten-ten Brinke (Co-Author)

Validation of the DYSMATE Test Battery for Dyslexia in German (Single Paper) Andrea Anderson (Presenting Author); Marie-Christine Vierbuchen (Co-Author); Trude Nergård-Nilssen (Co-Author); Rebecca Schumacher (Co-Author)

"Who is this designed for then?" equity-deserving students' experiences of group assessment  $({\rm Single~Paper})$ 

Joanna Tai (Presenting Author); Nicole Crawford (Co-Author); Rola Ajjawi (Co-Author); Margaret Bearman (Co-Author); Mollie Dollinger (Co-Author); Matt Brett (Co-Author); Alcy Meehan (Co-Author)

Advancing the Implementation of Intensive Longitudinal Methods in Educational Contexts (Single Paper)

Evelyn Steinberg (Presenting Author); Marie-Therese Schultes (Co-Author)

Session O 08 14:00–15:30 Location: HS 15.11

## Teacher beliefs, mentoring and practices

Chair Sarah Bichler Mindful integration in evidence-based lesson planning: constructing arguments from multiple sources (Single Paper)

Michael Wiedmann (Presenting Author)

Using GPT-generated content as sources in teachers' feedback provision on student writing (Single Paper)

Siyu Zhu (Presenting Author); Ziqi Zhang (Presenting Author); Xinhua Zhu (Co-Author)

Mentor Teachers Know Best?! Analyzing Conversational Skills in Mentoring Dialogues (Single Paper)

Bettina Gautel (Presenting Author); Katharina Mueller (Co-Author)

Prospective teachers' beliefs on the relevance of mathematical concepts (Single Paper)

Stefan Götz (Presenting Author); Felix Woltron (Presenting Author)

Session O 09 14:00–15:30 Location: HS 02.21

### Challenges in Teacher Education

Chair

Verena Pfeiffer

Finnish vocational student teachers' motivations to become a teacher and commitment to teaching (Single Paper)

Katja Vähäsantanen (Presenting Author); Merly Kosenkranius (Co-Author); Piia Kolho (Co-Author); Taina Civil (Co-Author); Heta Rintala (Co-Author)

Professional knowledge of student teachers to argue against antisemitism (Single Paper)

Ulrich Trautwein (Presenting Author); Lisa Zachrich (Co-Author); Katharina Netzer (Co-Author); Nicola Brauch (Co-Author)

Does Working on AI Influence Teacher Education Students' Perceptions of AI in Education? (Single Paper)

Claudia Schreiner (Presenting Author); Ann-Kathrin Dittrich (Co-Author)

Are future teachers driven to shape the digital society? A matter of typology (Single Paper)

Judit Martínez Moreno (Presenting Author); Dominik Petko (Co-Author)

Session O 10 14:00–15:30 Location: HS 01.15

## Harnessing (Generative) AI for Learning and Feedback

# Speaker

Olga Ioannidou

Generative Pre-Trained Transformer (GPT) Models as Automatic Scorers for Causal Diagrams (Single Paper)

Niklas Wenzel (Presenting Author); Héctor J. Pijeira-Díaz (Co-Author); Anique de Bruin (Co-Author)

A Cross-Disciplinary, Integrative Conceptual Framework for AI-Based Productive Dialogue Training (Single Paper)

Christa Asterhan (Presenting Author); Ayelet Baram-Tsabari (Co-Author); Avivit Arvatz (Co-Author); Elad Yacobson (Faculty of Education in Science and Technology)

Exploring the Role of GenAI-Supported VR-Based Training on Data Literacy for Teachers (Single Paper)

Sena Yildiz Degirmenci (Presenting Author); Laura Claudia Johanna Pflieger (Co-Author); Hong Gao (Co-Author); Enkelejda Kasneci (Co-Author); Maria Bannert (Co-Author)

Student feedback engagement in a Generative AI world (Single Paper)

Ying Zhan (Presenting Author); Zhihong Wan (Co-Author)

Session O 11 14:00–15:30 Location: HS 11.03

#### Exploring the Role of Technology for Enhancing Learning

#### Chair

Daniel Patrick Balestrini

Bridging the Gap: Exploring Individual Differences in Hand Proximity's Impact on Text Comprehension (Single Paper)

Romy Brömme (Presenting Author); Birgit Brucker (Co-Author); Maike Tibus (Co-Author); Peter Gerjets (Co-Author)

Assessing Divergent Thinking via Edit Distance in Creative Problem Solving with Educational Robotics (Single Paper)

Louis Köhler (Presenting Author); Patricia Reynaud-Bouret (Co-Author); Margarida Romero (Co-Author)

The impact of VITO: a digital literacy intervention for secondary school students (Single Paper)

Oriana Incognito (Presenting Author); Anna Paola Fallaci (Co-Author); Christian Tarchi (Co-Author)

Navigating New Frontiers: Utilizing ChatGPT in EFL Material Development and Educators' Perspectives (Single Paper)

Namdar Namdari (Presenting Author); Mahsan Ghayedi Karimi (Presenting Author)

Session O 12 14:00–15:30 Location: SZ 15.21

# Improving Teacher Education, Practices and Professional Development

Chair

Tosca Daltoè

Individual conceptions of data variability in Austrian Secondary Teacher Education (Single Paper)

Arabella Denk (Presenting Author)

The Evaluation of a Professional Development Program for Synchronous Online Teachers (Single Paper)

Maaike Grammens (Presenting Author); Fien De Smedt (Co-Author); Bram De Wever (Co-Author)

Transforming Academics' Teaching Conceptions and Practices: A Formative Pedagogical Intervention  $(Single\ Paper)$ 

Velibor Mladenovici (Presenting Author); Mariana Crasovan (Co-Author); Paula Ioana Cazan (Co-Author); Ilinca Sas (Co-Author); Crina Damsa (Co-Author); Marian Ilie (Co-Author)

Practicing how to cope with stress during school-based practicums; Can a work-book help!? (Single Paper)

Hanna-Sophie Homann (Presenting Author); Timo Ehmke (Co-Author)

Session O 13 14:00–15:30 Location: Festsaal

# Promoting and assessing domain learning and psychological needs

Chair

Steph Ainsworth

The Deliberate Practice Inventory (DPI): Development and Validation of a Multidimensional Instrument (Single Paper)

Victoria Jacobi (Presenting Author); Michael Schneider (Co-Author); Franzis Preckel (Co-Author); Jeanne Hierse (Co-Author)

Health-promoting lifestyle among university students in Mongolia and associated factors (Single Paper)

Erdenezul Uitumen (Presenting Author); Klára Tarkó (Co-Author)

How to assess physical literacy in preschool? (Single Paper)

Agnese Kretaine (Presenting Author); Helena Vecenane (Co-Author)

The Role of Load Reduction Instruction in Students' Psychological Needs and Learning Outcomes (Single Paper)

Serena Sun (Presenting Author); Paul Evans (Co-Author); Andrew Martin (Co-Author)

Session O 14 14:00–15:30 Location: HS 15.02

#### Innovative Interventions for Teacher Education

Chair

RICHARD REMEDIOS

Improving the explaining skills of student teachers in a virtual reality classroom simulation (Single Paper)

Chris Mayer (Presenting Author); Robert Mühldorfer (Co-Author); Juergen Seifried (Co-Author)

From barriers to bridges: Mapping challenges and synergies in School-University Partnerships (Single Paper)

Milena Sarmiento-Márquez (Presenting Author); Luis P. Prieto (Co-Author); Gerti Pishtari (Co-Author)

Reflective diaries with friendly criticism as empowerment tools for pre-service teachers (Single Paper)

Hadas Huber (Presenting Author); Anat Abramovich (Gordon Academic College)

 $\begin{tabular}{ll} \bf Video-based\ professional\ development\ in\ the\ Humanities\ and\ the\ Social\ Studies:\ \bf A\ Scoping\ Review\ (Single\ Paper) \end{tabular}$ 

Asher Albo (Presenting Author); Benzi Slakmon (Co-Author)

Session O 15 14:00–15:30 Location: HS 01.14

#### Emotional dynamics and motivation in learning

**Chair** Paula Pedić Temperament profiles: Prevalence, stability, and change over three school years (Single Paper)

Anna Rawlings (Presenting Author); Jaana Viljaranta (Co-Author); Satu Koivuhovi (Co-Author)

Mixed feelings about technology? Students' academic emotions, use of digital devices & multitasking (Single Paper)

Elina E. Ketonen (Presenting Author); Jussi Järvinen (Co-Author); Kirsti Lonka (Co-Author); Katariina Salmela-Aro (Co-Author)

Improving Math Attitudes in School-Age Students: A Meta-Analysis on Intervention Studies (Single Paper)

Enrica Donolato (Presenting Author); Sara Caviola (Co-Author); Monica melby-lervåg (Co-Author); Arne Lervåg (Co-Author); Alice Masi (University of Padova)

Validating the Cognitive-Affective Model: Effects of Positive Learning Environments on Learning  $({\rm Single\ Paper})$ 

Fangzheng Zhao (Presenting Author); Alyssa Lawson (Co-Author); Richard Mayer (Co-Author)

# Session O 16 14:00–15:30 Location: HS 15.14

## Teacher-Student and Peer Relationships

#### Chair

Einat Heyd-Metzuyanim

Visualizing the teacher-student relationship – an eye tracking study (Single Paper) Sarah Forster-Heinzer (Presenting Author); Yannick Sottas (Presenting Author); Silja Rohr-Mentele (Co-Author)

Adolescents' Peer Relations in Relationship to Higher Education Expectations (Single Paper)

Jacqueline Charpentier (Presenting Author); Vera Ronda (Co-Author); Trudie Schils (Co-Author)

Is empathy teachable? A systematic review of school-based empathy-related interventions (Single Paper)

Ana Camacho (Presenting Author); Patrícia Moreira (Co-Author); Gabriela Silva (Co-Author); Catarina Grande (Co-Author); Diana Alves (Co-Author); Teresa Leal (Co-Author); Joana Cadima (Co-Author)

Teachers' Perceptions and Reactions to Student Agency: An Experimental Study (Single Paper)

Luisa Molinari (Presenting Author); Luca Caricati (Co-Author); Valentina Grazia (Co-Author); Consuelo Mameli (Co-Author)

Session O 17 14:00–15:30 Location: HS 12.01

# Influences of Parents, Teachers and Culture

#### Chair

Gabriel Taban

Navigating Ambiguity: Professional Vision Development in Architecture Studio Teaching (Single Paper)

Edith Bouton (Presenting Author); Sarah Michaels (Co-Author); ZVI BEKERMAN (Co-Author); Adam Lefstein (The Hebrew University of Jerusalem)

International Perspectives on the effectiveness of Teach For All: Contrasting Two Country's Models (Single Paper)

Kata Mihaly (Presenting Author); Jonathan Schweig (Co-Author)

What is digital parenting? - Exploring parents' views of the role of digital technology in parenting  $({\rm Single\ Paper})$ 

Katriina Sipiläinen (Presenting Author); Ville Heilala (Co-Author); Noona Kiuru (Co-Author); Juho Polet (Co-Author); Sahsenem Öz (Co-Author); Mikko Aro (Co-Author); Riikka Korja (Co-Author); Raija Hämäläinen (Co-Author)

Effects of parental feedback on children's perceived feedback, motivation and achievement (Single Paper)

Fabian Hoya (Presenting Author); Frank Hellmich (Presenting Author); Margarita Knickenberg (Co-Author)

Session O 18 14:00–15:30 Location: SR 03.K1

# Support and Identification of Special Educational Needs

#### Chair

Eve Eisenschmidt

From Risk to Diagnosis: A Retrospective Look on Children at Risk for Co-Occurring Dyslexia and ADHD (Single Paper)

Silke Kellens (Presenting Author); Dieter Baeyens (Co-Author); Pol Ghesquière (Co-Author)

Children and kindergarten's factors influence the allocation of special education in kindergarten (Single Paper)

Louie Lei Wang (Presenting Author); Monica melby-lervåg (Co-Author); Mari Vaage Wang (Co-Author)

The Influence of Speech Sound Skills on Language and Literacy Beyond Phonological Awareness (Single Paper)

Trude Nergård-Nilssen (Co-Author); Michelle N. Maurer (Co-Author); Oddgeir Friborg (Co-Author); Monica melby-lervåg (Co-Author); Line Walquist-Sørli (UiT the Arctic University of Norway)

Smooth transitions from pre- to primary school for children with support needs: A systematic review (Single Paper)

Erica Kamphorst (Presenting Author)

Session O 19 14:00–15:30 Location: HS 02.23

# Citizenship, Democracy and Moral Agency

#### Chair

Niels van der Baan

Professional development in an informal political education setting: towards an empowering practice (Single Paper)

Juana Sarmiento Jaramillo (Presenting Author)

The University as a Democratic Place of Appearance and Imagination Amid Instrumental Pressures (Single Paper)

Rūta Petkutė-Budrė (Presenting Author)

Roles of Moral Disengagement and Moral Sensitivity in Students' Antisocial Bystander Intentions (Single Paper)

Mareike Brehmer (Presenting Author); Jennifer Mayer (Co-Author)

A systematic review of the role of schools in promoting equality in students' citizenship education (Single Paper)

Margaux Pyls (Presenting Author); Elvira Crois (Co-Author); Alex de Pape (Co-Author); Free De Backer (Co-Author); Jerich Faddar (Co-Author); Koen Lombaerts (Co-Author)

# Session O 20 14:00–15:30 Location: HS 15.06

## Factors influencing learning and performance

#### Chair

Marwin Felix Loeper

Student-perceived agency in relation to the course-specific implementation of university studies (Single Paper)

Päivikki Jääskelä (Presenting Author); Elina Vaara (Co-Author); Maarit Arvaja (Co-Author); Asko Tolvanen (Co-Author); Anna-Maija Poikkeus (Co-Author)

Intra-individual differences in math and reading: the effects of time of day and day of week (Single Paper)

Anne Hoogmoed (Presenting Author); Linda Visser (Co-Author); Goffredina Spano (Co-Author); Priscilla Oomen (Co-Author)

The Psychometric Properties of the Cognitive Assessment System in a Scandinavian Context (Single Paper)

Niklas Fröst (Presenting Author); Petri Partanen (Co-Author); Billy Jansson (Co-Author)

A Systematic Review of Research on Developing Teachers' Disciplinary Knowledge for STEM Integration (Single Paper)

Susan Yoon (Presenting Author); Katherine Miller (Co-Author); Thomas Richman (Co-Author); Noora Noushad (Co-Author); Grace Hageman (Co-Author); Yolanda Liu (Co-Author); Weiyi Zhang (Co-Author); Amanda Cottone (University of Pennsylvania)

Session O 21 14:00–15:30 Location: HS 15.13

# Developing Teaching Skills for Diverse and Demanding Contexts

#### Chair

Maria-Martine Oppmann

Factors that Contribute to Six Types of Teacher-Environment Fit: A Qualitative Thematic Analysis (Single Paper)

Xiulin Zheng (Presenting Author); Ying CHEN (Co-Author); Hui Wang (Co-Author)

Using cultural diversity in education teams, what skills do we need? A scoping review (Single Paper)

Mees Kok (Presenting Author); Patricia Brouwer (Co-Author); Piety Runhaar (Co-Author); mieke koeslag-kreunen (Co-Author); Piet Van den Bossche (Co-Author)

Job Demands in the Daily Work of Teachers in Vocational Education: Challenge or Threat? (Single Paper)

Nina Marlene Sarochan (Presenting Author); Carmela Aprea (Co-Author)

How to foster pre-service teachers' behavior assessment skills with the SORKC model (Single Paper)

Sarah Burkhardt (Presenting Author); Anja Böhnke (Co-Author); Felicitas Thiel (Co-Author)

# Session O 22 14:00–15:30 Location: HS 05.01 Experimentierhörsaal

# Reading and language development across diverse contexts

#### Chair

Stephanie MacMahon

Orthographic and semantic characteristics of reading errors in a transparent orthography (Single Paper)

Zsóka Sipos (Presenting Author); Orsolya Kis (Co-Author); Gáborné Demeter (Co-Author); János Steklács (Co-Author)

How language choices and language competencies shape educational outcomes in Germany (Single Paper)

Lisa Teufele (Presenting Author); Clievins Selva (Co-Author)

Investigating young learner foreign language reading and digital pedagogy (Single Paper)

Suzanne Graham (Co-Author); James Turner (Co-Author); Heike Krusemann (Co-Author); Anthony Zhang (Co-Author); Kate Borthwick (Co-Author); Travis Ralph-Donaldson (Co-Author); Alison Porter (University of Southampton)

A Multidimensional Framework of Prior Knowledge in Online Credibility Evaluation (Single Paper)

Carita Kiili (Presenting Author); Ivar Bråten (Co-Author); Julie Coiro (Co-Author)

Session O 23 14:00–15:30 Location: HS 02.01

### Young Children Development and Learning

#### Chair

Josien Boetje

How Parents' Perceive Well-Being, Perceptions, and Emphasis on Learning among Pre-School Children? (Single Paper)

Katja Upadyaya (Presenting Author); Saara Salo (Co-Author); Mirjam Kalland (Co-Author); Katariina Salmela-Aro (Co-Author)

A Comprehensive Study on Character Strengths and Holistic Development in Early Childhood (Single Paper)

Cheuk Ming Ho (Presenting Author); Catherine Mamaid Capio (Co-Author); King Chung (Derwin Chan)

Children's Subjective Well-Being in ECEC provisions – A Literature Review (Single Paper)

Thomas Moser (Presenting Author); May Irene Furenes Klippen (Co-Author); Ann Cecilie Bergene (Co-Author); Ragnhild Lenes (Co-Author)

Session O 24 14:00–15:30 Location: HS 44.11

Supporting Lifelong Learning: From Early Childhood to Adult Education

Chair

Ania Majewska

Understanding Lifelong Learning: An Analysis of Student Perspectives (Single Paper)

Lynn Van den Broeck (Presenting Author); Rani Dujardin (Co-Author)

THE LENS THROUGH WHICH LOW-EDUCATED ADULTS CONCEIVE LEARNING IN SECOND-CHANCE EDUCATION (Single Paper)

Bea Mertens (Presenting Author); Sven De Maeyer (Co-Author); Vincent Donche (Co-Author)

Supporting psychosocially burdened families from the beginning: ECEC and ECI in the focus (Single Paper)

Anna Mues (Presenting Author); Franka Römig (Co-Author); Michaela Ott (Co-Author); Ilona Renner (Co-Author); Anna Neumann (Co-Author); Ulrike Lux (Co-Author)

Influence of parents' and teachers' beliefs on children's implicit theories and learning (Single Paper)

Nadine Schuler (Presenting Author); Caroline Villiger (Co-Author)

Session O 25 14:00–15:30 Location: HS 11.02

Supporting communication and learning through dialogue and interventions

Chair

Laura Landi

Early executive functions predict outcomes in neurodevelopmental disorders: a systematic review (Single Paper)

Chiara Pecini (Presenting Author); Marta Berni (Co-Author); Stefano Scatigna (Co-Author); Roberta Igliozzi (Co-Author); Sara Mazzotti (Co-Author); Sara Calderoni (Co-Author); Alice Martinelli (Co-Author); Raffaella Tancredi (Co-Author); Andrea Guzzetta (Co-Author)

Evidence-Based Practice in Speech-Language Therapy: Individual and Contextual Predictors (Single Paper)

Verena Hofmann (Presenting Author); Sonja Schäli (Co-Author); Erich Hartmann (Co-Author)

Promoting at-risk children's story comprehension in early childhood through dialogic reading (Single Paper)

Tiia Lindfors (Presenting Author); Anu Kajamies (Co-Author); Anne Sorariutta (Co-Author); Mikko Haavisto (Co-Author); Janne Lepola (Co-Author); Aino Mattinen (University of Turku)

Unifying Dialogic Teaching and Mathematics Teaching through a Commognitive Lens (Single Paper)

Naama Ben-Dor (Presenting Author); Avital Elbaum-Cohen (Co-Author)

# Session O 26 14:00–15:30 Location: HS 05.12

## Strategies for learning and inquiry

#### Chair

Sabiha Üzüm

Guided Inquiry in a Physics Simulation: Profiles of Successful and Less Successful Students (Single Paper)

Mert Tutenkan (Presenting Author); Mohammadreza Farrokhnia (Presenting Author); Tessa Eijsink (Co-Author)

Retrieval Practice in Higher Education: Causality and transfer in a gateway math course (Single Paper)

Jakob Schwerter (Presenting Author); Thomas Dimpfl (Co-Author); Matthew Bernacki (Co-Author); Fani Lauermann (University of Bonn)

Investigating learner errors in simulation-based inquiry learning (Single Paper) Mari Fukuda (Presenting Author); John Nesbit (Co-Author); Philip Winne (Co-Author)

Understanding Scaffold Interactions' Impact on Learning: A Fine-Grained Analytical Approach (Single Paper)

Lyn Lim (Presenting Author); John Saint (Co-Author); Joep van der Graaf (Co-Author); Yizhou Fan (Co-Author); Shaveen Singh (Co-Author); Mladen Raković (Co-Author); Inge Molenaar (Co-Author); Dragan Gasevic (Co-Author); Maria Bannert (Co-Author)

# Competences for Learning with Educational Technology Across Contexts

#### Chair

Katarina Gvozdic

Hybrid Test Formats in Primary School: A Video Study in the Field of Orthography Competence (Single Paper)

Seda Yilmaz Wörfel (Presenting Author); Kati Pügner (Co-Author); Michael Prof. Dr. Krelle (Co-Author)

Development and validation of the Self-Efficacy Scale for Digital Competence (Single Paper)

Normand Roy (Presenting Author); Chantal Tremblay (Co-Author); Bruno Poellhuber (Co-Author); Alexandre Lepage (Co-Author)

Pre-service teachers' profiles from ML knowledge and AI attitude: Relations with AI Literacy (Single Paper)

Jari Laru (Presenting Author); Ismail Celik (Co-Author); Iiris Kivioja (Co-Author); Kati Mäkitalo (Co-Author)

Metaphors in Preschooler's Learning With and About AI (Single Paper)

Kati Sormunen (Presenting Author); Tarja Pietarinen (Co-Author); Sini Davies (Co-Author); Kaiju Kangas (Co-Author); Teemu Roos (Co-Author)

Session O 28 14:00–15:30 Location: HS 11.01

### Innovations and Challenges in Assessment Methods

Chair

Azusa Nakata

Digital Pitfalls: The Negative Impact of Online Testing Formats on Academic Performance (Single Paper)

Daria Benden (Co-Author); Fani Lauermann (Co-Author); Nawael Niazy (University of Bonn)

Assessment Formats, Student Satisfaction and Performance in Business and Economics Education (Single Paper)

Laurie Delnoij (Presenting Author); Javier Fernández (Co-Author)

AI-based assessment of text quality in early primary school (Single Paper)

Daniel Then (Co-Author); Caroline Theurer (Presenting Author); Sanna Pohlmann-Rother (Co-Author)

The Impact of Student Participation in Classroom Discourse on Academic Achievement (Single Paper)

Klára Šeďová (Presenting Author); Martin Sedláček (Co-Author)

FUTURE EDUCATION Early Career Award Ceremony

16:00-17:30

Location: Main Reading Room of the Graz University Library

FUTURE EDUCATION Early Career Award Ceremony

Session P 01 16:00–17:30 Location: SR 03.K1

# Caputring Emotions and Engagement in Diverse Contexts

Chair

Raisa Carpelan

Emotional and Cognitive Factors of Teacher Engagement in Chile: a Longitudinal Study (Single Paper)

Paulina Guzman (Presenting Author); Jorge Varela (Co-Author); Pedro Avila (Co-Author); Roy Hidalgo (Co-Author); Belén Valdivia (Co-Author)

Hope in Adversity: Uncovering Factors of Educational Success in Roma Communities (Single Paper)

Tânia Moreira (Presenting Author); Márcia Ferreira (Co-Author); Pedro Rosário (Co-Author); Cleia Zanatta (Co-Author)

Self-Efficacy, Emotions and Mathematics Achievement: Longitudinal Effects of Flipped Learning (Single Paper)

Petri Nokelainen (Presenting Author); Terhi Kaarakka (Co-Author); Ilmari Puhakka (Co-Author); Riikka Kangaslampi (Co-Author); Jani Hirvonen (Co-Author); Simo Ali-Löytty (Co-Author); Vikke Vuorenpää (Co-Author); Elina Viro (Co-Author)

Session P 02 16:00–17:30 Location: HS 25.11

#### Teacher and student emotions and motivation

#### Chair

Zoë Maj Sander

Profiling secondary students' motivation and its antecedents (Single Paper)

Christian Brandmo (Presenting Author); Mari Vaage Wang (Co-Author); Gunnar Bjørnebekk (Co-Author); Rolf Vegar Olsen (Co-Author)

Navigating feedback: the interplay between self-efficacy and internal feedback in student learning (Single Paper)

Ana Remesal (Presenting Author); Maite Fernandez Ferrer (Co-Author); Ludmila Martins Gironelli (Co-Author); Elena Cano (Co-Author)

Preservice mathematics teachers' motivation: operationalization and relevance for study processes (Single Paper)

Lara Gildehaus (Presenting Author)

Emotional Discussions: Complex Dynamic Systems Exploration of Teacher Emotions During Discussions (Single Paper)

Joseph Eisman (Presenting Author); Andrew del Calvo (Co-Author); Tiferet Ani (Co-Author); Mary Grace Hodge (Co-Author); Avi Kaplan (Co-Author); Wendy Chan (Co-Author); Timothy Patterson (Co-Author); Abby Reisman (Co-Author)

Session P 03 16:00–17:30 Location: HS 15.06

# Promoting Reasoning and Judgment in Cognitive Tasks

#### Chair

Johanna Pöysä-Tarhonen

Personification increases recall and perceived source credibility in misinformation refutation texts (Single Paper)

Mônica Macedo-Rouet (Presenting Author); Ana Luisa Sant'Ana (Co-Author); Juliana Assis (Co-Author); Gastón Saux (Co-Author)

Team-Based Diagnostic and Intervention Reasoning in a VR Simulation: Toward A Process Model (Single Paper)

Constanze Richters (Presenting Author); Frank Fischer (Co-Author); Martin Fischer (Co-Author); Vitaliy Popov (University of Michigan-Ann Arbor)

Judging a Text by its Author - A Meta-Analysis of Interventions on Source Credibility Judgement (Single Paper)

Marvin Fendt (Presenting Author); Xenia Muth (Co-Author); Peter Edelsbrunner (LMU Munich)

"It's not a multiple-choice question": different strategies for resolving experts' disagreements (Single Paper)

Qiuyu Lin (Presenting Author); Qianqian Gao (Co-Author); Clark Chinn (Co-Author); Toshio Mochizuki (Co-Author); Samuel Manson (Co-Author)

Promoting Mechanistic Reasoning: Engaging in Scientific Modeling with Simulations in Electricity (Single Paper)

Janan Saba (Presenting Author)

Session P 04 16:00-17:30 Location: HS 11.03

## Cognition, emotion and AI: Insights into learning and assessment

#### Chair

Minna Hannula-Sormunen

Mistrust as a cognitive load? An Experimental Investigation of Trust in Al-Generated Learning Texts (Single Paper)

Felix Krieglstein (Co-Author); Lukas Wesenberg (Co-Author); Günter Daniel Rey (Co-Author); Sebastian Jansen (Technische Universität Chemnitz)

Response Behavior is a Good Proxy for Difficulty Estimation in Adaptive Learning Environments (Single Paper)

Guher Gorgun (Presenting Author); Okan Bulut (Co-Author); Marlit Lindner (Europa-Universität Flensburg)

A Cross-Study Comparison of Human and GenAI Expertise in MCQ Creation Using the PIRLS Framework (Single Paper)

WEIQI LIU (Presenting Author); Samuel Chu (Co-Author); Ho Sang Lam (Co-Author); John S. Y. Lee (Co-Author); Tyrone Tai-On Kwok (Co-Author); Ying Wai Bryan Ho (Co-Author); Xiao Hu (Co-Author); Elsie Ong (Co-Author); Chloe Lam (Co-Author); Yee Nim Sarah Kam (Co-Author)

Examining How Emotions Shape Student Self-Assessment via State-Transition Analysis (Single Paper)

Nathan Rickey (Presenting Author); Ernesto Panadero (Co-Author); Christopher DeLuca (Co-Author)

Session P 05 16:00–17:30 Location: Festsaal

# Corporate and Organization Learning

#### Chair

Ulrich Riegel

Between self-exploitation and self-organisations: The future of digital learning in organisations (Single Paper)

Karen Schwien (Presenting Author); Tobias Schlömer (Co-Author); Jennifer Liehr (Co-Author); Sven Hauff (Co-Author)

Tacit Knowledge and Situation Awareness in the Asphalt Industry: The Role of Experience (Single Paper)

Ilona Friso-van den Bos (Presenting Author); Melvin Pluijmaekers (Co-Author); Bas Kollöffel (Co-Author)

Shaping Minds and Brains in the Workplace: Understanding and Advancing Onthe-job learning (Single Paper)

Stephanie MacMahon (Presenting Author)

Measuring corporate learning culture via self-report questionnaires!? (Single Paper) Katja Häußermann (Presenting Author); Tatjana Grefe (Co-Author); Tina Seufert (Co-Author)

The Six C's of Successful HE-Industry Collaboration in Eng. Edu. : A Systematic Literature Review (Single Paper)

Session P 06	16:00-17:30	Location: HS 15.14
Student cognitive, affective	e, behavioral engagement in learning and self-regulation	1
<b>Chair</b> Peter Bergström	Constructive engagement when learning with instructional of when and how? (Single Paper) Anke Wischgoll (Presenting Author); Monika Post (Co-Author) Do Animated Agents Serve as Retrieval Cues During the	•
	Paper) Christina Sondermann (Presenting Author); Hannes Schröter (Co-Author)	•
	Students' Behavioral, Cognitive and Affective Outcomes in (Single Paper) Xinlei Sun (Presenting Author); Maximilian Sailer (Co-Author)	n GFC: A Meta-analysis

The Self-Regulation Challenge of Opting-Out Efficiently (Single Paper)

Session P 07	16:00-17:30	Location: HS 01.22
Higher Education and Doo		
Chair Honghong Bai	A Belonging Intervention to Reduce Social Identity Threa ucation (Single Paper) Nathalie Bick (Presenting Author); Laura Froehlich (Co-Author); René F. Kizilcec (Co-Author); Lena Schützler (Co-Author) Validation of the Parents Motivational Messaging Scale (Figher education (Single Paper) RICHARD REMEDIOS (Presenting Author); Erika Spray (Co-Author); Tegan Bradley (Co-Author)	nor); Mai Grundmann (Co-r); Oliver Christ (Co-Author) PMMS) within Australian
	Mapping a bumpy journey to capture self-regulated learning experiences in a	

Rakefet Ackerman (Presenting Author)

minor (Single Paper)

Weiwei Li (Presenting Author)

Exploring Chinese Pre-PGRs' Research Self-Efficacy and their Doctoral Preparation in the UK (Single Paper)
Zhihan Wu (Presenting Author)

Session P 08 16:00–17:30 Location: HS 44.11

## Hard and soft skills in challenging times

#### Chair

Narges Ranginkaman

Faculty Development and new faculty: a cross-sectional study at the University of Trento (Single Paper)

Elena Benini (Presenting Author); Federica Picasso (Co-Author); Daniele Agostini (Co-Author); Sabrina Maniero (Co-Author); Paola Venuti (Co-Author); Anna Serbati (Università degli studi di Trento)

Transfer Knowledge of Hard-Skill Trainers and Soft-Skill Trainers (Single Paper) Bastian de Jong (Presenting Author); Susanne Wisshak (Co-Author)

From SEL to SPEL: Social Political Emotional Learning in Education During Crisis (Single Paper)

Keren Ketko-Ayali (Presenting Author); Adar Cohen (Co-Author); Nir Michaeli (Co-Author)

Relationship between Primary Students' Socioscientific Decision-Making and Risk Perception (Single Paper)

Miki Sakamoto (Presenting Author); Etsuji Yamaguchi (Co-Author); Tomokazu Yamamoto (Co-Author); Motoaki Matano (Co-Author); Rumiko Murayama (Co-Author)

<u>Session P 09</u> 16:00–17:30 Location: HS 46.01

# Executive functioning, reading and reading difficulties

#### Chair

Francesco Nappo

Writing Produces Better Calibrated Learners than Rereading (Single Paper)

Julianne van Meerten (Presenting Author); Donald J. Bolger (Co-Author); Daniel Dinsmore (Co-Author); Diane Schallert (Co-Author)

Mixing Theories (Single Paper)

Dominik E. Froehlich (Presenting Author); Esther de Groot (Co-Author)

Development of Executive Functions in Children at Risk for Co-Occurring Dyslexia and ADHD  $({\rm Single~Paper})$ 

Silke Kellens (Presenting Author); Rory T. Devine (Co-Author); Dieter Baeyens (Co-Author); Pol Ghesquière (Co-Author)

The role of Executive function in reading comprehension difficulties: evidence from spanish (Single Paper)

Pablo Escobar (Presenting Author)

# Session P 10 16:00-17:30 Location: SZ 15.21

## Leaning about and Evaluating Digital Content

Chair

Marije van Amelsvoort

The Potential of Accredited European Schools as a Forward-Looking Model. A case study. (Single Paper)

Christian Kraler (Presenting Author); Sabrina Bacher (Co-Author); Claudia Schreiner (Co-Author); Selina Silian (Co-Author)

Socioeconomic Status and Digital Safety among Primary School Students: Roles of Executive Functions (Single Paper)

Jing Huang (Presenting Author)

Individual differences in the evaluation of online content by primary school children (Single Paper)

Tina Jocham (Presenting Author); Sanna Pohlmann-Rother (Co-Author)

From Fragmented Knowledge to Emerging Coherence: Children's Conceptual Change in Internet Principles  $({\rm Single~Paper})$ 

Cyril Brom (Presenting Author); Anna Yaghobová (Co-Author); Anna Drobná (Co-Author); Marek Urban (Co-Author); Daniel Šťastný (Co-Author); Andrea diSessa (Co-Author)

<u>Session P 11</u> 16:00–17:30 Location: HS 12.01

### Executive Functions, Sense Making, and Digital Tools

Chair

Michael Goller

The Development of Student Sensemaking during a Modeling and Simulation Program (Single Paper)

Daniel Dinsmore (Presenting Author); Xavier Rozas (Co-Author); Yvonne Day (Co-Author); Cherie Montoya (Co-Author); Eric Schoute (University of North Florida)

The role of executive functions in reading comprehension according to text complexity (Single Paper)

Victoria Espinoza (Presenting Author)

The effectiveness of digital tools on achievement and self-regulated learning – A meta-analysis (Single Paper)

Sog Yee Mok (Presenting Author); Francesca Suter (Presenting Author); Ayşenur Alp Christ (Co-Author); Janina Täschner (Co-Author); Tabea L. Achermann (Co-Author); Michael Sailer (Co-Author); Elisabeth Bauer (Co-Author); Sascha Schneider (Co-Author)

RAN assessed in a second language and the influence of L2 spoken proficiency (Single Paper)

Helene Berntsen (Presenting Author); Oddny Judith Solheim (Co-Author); Linda Wheeldon (Co-Author)

# Session P 12 16:00–17:30 Location: HS 15.03

# Use of AI, VR and and Other Digital Methods

Chair Ian Thacker Requirements for AI-enhanced thesis assessment in higher education: A group concept mapping study (Single Paper)

Maryam Alqassab (Presenting Author); Iwan Wopereis (Co-Author); Hubert Vogten (Co-Author)

Teacher's professional vision: The importance of course activities for the analysis of eye movements (Single Paper)

Senne Van Hoecke (Presenting Author); Halszka Maria Jarodzka (Co-Author)

University-Students Perspectives on Chatbots: Insights from an Experimental Study (Single Paper)

Eileen Plagge (Presenting Author); Regina Jucks (Co-Author)

Spot the Flaws: A VR Quest and the Role of Immersion, Motivation and Flow on VET Student Performance  $({\rm Single~Paper})$ 

Francesca Amenduni (Presenting Author); Christopher Keller (Co-Author); Gaby Walker (Co-Author); Alberto A.P. Cattaneo (Co-Author)

Session P 13 16:00–17:30 Location: HS 02.21

# Mentorship, collaboration and workload in teaching and supervision

Chair

Sandra Preusler

Lightening the Load: Factors Influencing Teacher Orchestration Load in Synchronous Hybrid Education (Single Paper)

Tine Keulemans (Presenting Author); Fien Depaepe (Co-Author); Annelies Raes (Co-Author)

Doctoral Writing Supervision and the Formation of Future Mentor Identities (Single Paper)

Lina Calle-Arango (Presenting Author); Gala Campos (Co-Author)

Parental involvement in school: A supportive or a risk factor for teachers' well-being? (Single Paper)

Annalisa Soncini (Presenting Author); Emilio Paolo Visintin (Co-Author); Stijn Van Petegem (Co-Author); Maria Cristina Matteucci (University of Bologna)

Supporting Beginning Teachers: a Multi-Informant Study On How Several Actors See Their Role (Single Paper)

Silke Hellebaut (Presenting Author)

# Session P 14 16:00–17:30 Location: HS 15.12

## Student Engagement, Self-Concept and Wellbeing

#### Chair

May Janne Sandblåst Husevåg

What's BOThering You? Building up students' daily mental well-being (Single Paper)

Janne Bosma (Presenting Author); Fakhra Jabeen (Co-Author); Caroline van Rooij (Co-Author); Mihai Constantin (Co-Author); Nele Jacobs (Co-Author); Johan Lataster (Co-Author); Renate de Groot (Co-Author)

The Dynamics of School Wellbeing, Academic Buoyancy and Learning Difficulties in Early Adolescence (Single Paper)

Marika Kiviluoma-Ylitalo (Presenting Author); Andrew Martin (University of New South Wales); Vilija Hiltunen (Co-Author); Eija Pakarinen (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author); Noona Kiuru (Co-Author)

Examining Bidirectional Longitudinal Relations between the Impostor Phenomenon and Envy in School (Single Paper)

Marko Lüftenegger (Presenting Author); Melanie Sticha (Co-Author); Flora Fassl (Co-Author); Maximilian Hofleitner (Co-Author)

Reciprocal Effects Between Academic Self-Concept and Achievement: A Replication Study (Single Paper)

Fernando NUNEZ-REGUEIRO (Presenting Author); Pascal Pansu (Co-Author); Pascal Bressoux (Co-Author); Herb Marsh (University of Oxford)

Session P 15 16:00–17:30 Location: HS 02.11

# Student views of AI and AI use for teaching and scoring

#### Chair

Suvi Kanerva

A Rasch Measurement Approach to Compare Instructor and ChatGPT Scoring in Higher Education (Single Paper)

Yesim Capa Aydin (Presenting Author); Busra Zeynep Arslan (Co-Author); Burcu Ozcan (Co-Author)

Mathematics teachers' practices with digital media and their influence on students' learning outcome  $(Single\ Paper)$ 

Alina Kadluba (Presenting Author); Andreas Obersteiner (Co-Author); Frank Reinhold (Co-Author)

How AI Attitudes, AI Interest, AI Use, and AI Literacy Build University Students' AI Self-Efficacy (Single Paper)

Marie Hornberger (Presenting Author); Arne Bewersdorff (Co-Author); Claudia Nerdel (Co-Author); Daniel Schiff (Co-Author)

A quasi-experimental study of teaching with generative AI (Single Paper) Rebekka Dees (Presenting Author); Sandra Bley (Co-Author)

# Session P 16 16:00-17:30 Location: HS 01.14

## Motivation, Learning and Achievement in Maths

#### Chair

Franziska Zellweger

Motivational Profiles and Their Impact on Mathematical Achievement: a LPA in High School Students (Single Paper)

Trinidad Garcia (Co-Author); Débora Areces (Co-Author); Celestino Rodríguez (Co-Author); José Carlos Núñez (Co-Author); Amanda Abín Álvarez (University of Oviedo)

(How) Does the Support of Basic Psychological Needs Affect Apprentices' Professional Knowledge? (Single Paper)

Jennifer Schauer (Presenting Author); Stephan Abele (Co-Author); Julian M. Etzel (Co-Author)

Developmental trajectories of math self-efficacy from Grades 2 - 12 (Single Paper) Kaja Mädamürk (Presenting Author); Eve Kikas (Tallinn University)

**High-achieving students in mathematics: a heterogeneous group** (Single Paper) Emilie Prast (Presenting Author); Marian Hickendorff (Co-Author); Eva van de Weijer-Bergsma (Co-Author)

The Role of Sociocultural Context in Shaping the Students' Minds for Mathematical Learning (Single Paper)

Linda Salihu (University of Prishtina); Saranda Shabanhaxhaj (University of Graz)

Session P 17 16:00–17:30 Location: HS 15.11

# The Role of Teachers and Parents for Succesful Learning

#### Chair

Morane Stevens

An observation system for assessing teaching quality in early reading and writing instruction (Single Paper)

Armin Jentsch (Presenting Author); Petra Hanke (Co-Author); Janine Mühle (Co-Author); Jonas Weyers (Co-Author); Johannes König (Co-Author)

Digital Media in Primary and Elementary Education – A Challenge for Teachers? (Single Paper)

Anna M. Eder-Jahn (Presenting Author); Christine Trültzsch-Wijnen (Co-Author)

The Cultural Preparedness of Teachers and Schools for the Implementation of Values Education (Single Paper)

Marius Bytautas (Presenting Author); Sigitas Daukilas (Co-Author)

Home literacy environment and parental individual variables: what the relationships? (Single Paper)

Oriana Incognito (Presenting Author); Alice Mercugliano (University of Florence)

Session P 18	16:00–17:30	Location: HS 11.02
STEM, gender and agency in learning and teaching		
Chair Carsten Quesel	The Role of Academic Self-Concept and Gender Stereotype Choices Among Students (Single Paper) Anke Maria Weber (Presenting Author); Christoph Niepel (Co-Auth	·
	(Don't) Behave like a man! A video analysis of gender differences in teacher disciplinary practices (Single Paper) Sophie Harms (Presenting Author); Sarah Gentrup (Co-Author); Kristin Schotte (Co-Author); Aileen Edele (Co-Author)	
	Designing and Validating a Scale of the Agency of Young Paper) Zhihong Wan (Presenting Author)	STEM Makers (Single
	The Impact of Peer Tutoring on Students' Computational Activities (Single Paper) Vaso Anastasiou (Presenting Author); Yiota H. Diakou (Co-Author)	

Session P 19	16:00-17:30	Location:	HS 11.01
Aspects of welbeing in doctoral candidates and	d supervisors		

Author)

Chair Sabine Seufert PhD candidates' and supervisors' wellbeing and experiences of supervision (Single Paper)

Elina E. Ketonen (Presenting Author); Lotta Tikkanen (Co-Author); Auli Toom (Co-Author); Kirsi Pyhältö (Co-Author)

Investigating the Role of Psychological Safety in Doctoral Learning and Development (Single Paper)

Jayne Carruthers (Presenting Author); Allyson Holbrook (Co-Author)

Unpacking Teachers' Person-Environment Fit: Effects on Emotional Exhaustion and Quitting Intentions (Single Paper)

Hui Wang (Presenting Author); Ying CHEN (Co-Author); Xiulin Zheng (Co-Author)

Antecedents of occupational wellbeing among PhD supervisors in Africa and in Finland (Single Paper)

Laura Sundström (Presenting Author); Lotta Tikkanen (Co-Author); Kirsi Pyhältö (Co-Author)

Session P 20 16:00–17:30 Location: HS 05.12

# Enhancing Learning with Adaptive Technology, GenAI and Feedback

#### Chair

Thomas Martens

Does simple feedback about answer length improve learning and metacognitive accuracy? (Single Paper)

Katharina Fleig (Presenting Author); Emely Hoch (Co-Author); Andreas Lachner (Co-Author); Katharina Scheiter (Co-Author)

Effects of prior knowledge on affective processing of computer-based feedback: An EDA study (Single Paper)

Thérése Eder (Presenting Author); Salome Wagner (Co-Author); Leonie Sibley (Co-Author); Andreas Lachner (Co-Author)

The Role of Metacognition and Epistemological Beliefs in Student Writing Using Generative AI (Single Paper)

Marek Urban (Presenting Author); Veronika Hein (Co-Author); Filip Svacha (Co-Author); Filip Dechterenko (Co-Author); Jiri Lukavsky (Co-Author); Cyril Brom (Co-Author); Kamila Urban (Co-Author)

Do Self-Developed Adaptive Learning Systems Aid Learning? (Single Paper)

Luisa Wellert (Presenting Author); Sara Becker (Co-Author); Leonie Sibley (Co-Author); Vincent Aleven (Co-Author); Andreas Lachner (Co-Author)

Session P 21 16:00–17:30 Location: HS 15.04

# Beyond Performance: Motivation, Emotions and Equity

#### Speaker

Peter Reimann

Students' interpersonal emotions towards classmates: a blind spot in educational research?! (Single Paper)

Stefan Markus (Presenting Author); Cornelia Gar (Co-Author)

Upper-secondary school students' attitudes, knowledge, and motivation in climate education (Single Paper)

Inka Ronkainen (Presenting Author); Jari Lavonen (Co-Author); Katariina Salmela-Aro (Co-Author); Veli-Matti Vesterinen (University of Helsinki)

Beyond Competition: Unveiling the Role of Mastery Goals in Cooperative Contexts: Insights from PISA (Single Paper)

Athanasios Mouratidis (Presenting Author); Aikaterini Michou (University of Ioannina)

Girls' double burden: Sex gaps in social-emotional skills and their unequal effects on achievement (Single Paper)

Jorge Varela (Presenting Author); Montserrat Cubillos (Co-Author); Ana María Espinoza Catalán (Co-Author)

Session P 22 16:00–17:30 Location: HS 05.01 Experimentierhörsaal

# Measuring Learning Processes as They Unfold

Chair

Trinidad Garcia

Instructing Joint Attention in Collocated CSCL: Interrupting and Cinema-Effects of Gaze Instruction (Single Paper)

William Pfannenstiel (Presenting Author); Andreas Korbach (Co-Author); Armin Weinberger (Co-Author); Albulene Grajcevci (Saarland University)

The Interplay of Language and Mathematics in Word Problem Solving: The Details Matter (Single Paper)

Christian Schons (Co-Author); Alina Knabbe (Co-Author); Markus Vogel (Co-Author); Kyra Saado (Co-Author); Andreas Obersteiner (Co-Author); Anselm Strohmaier (Ludwigsburg)

Smartpens for Note Taking in Inclusive High School Classes (Single Paper) Joseph Boyle (Presenting Author)

Characterizing the Neural Conversion of Analog Quantities to Symbolic Numbers (Single Paper)

Michael Slipenkyj (Presenting Author); Daniel Ansari (Co-Author); Ian Lyons (Co-Author)

Session P 23 16:00–17:30 Location: HS 15.05

# Challenges in developing regulated learning across educational levels

Speaker Mia Čovic Participation and cooperation as features of developing learning spaces (Single Paper)

Cornelia Dinsleder (Presenting Author); Annette Tettenborn (Co-Author)

Enhancing a Peer Observation Tool for Learning Regulation in Portuguese Basic & Secondary Education (Single Paper)

Daniela Pedrosa (Presenting Author); Daniela Pinto (Co-Author)

Regulated learning as a multi-layered system in collaboration: An innovative approach (Single Paper)

Suijing Yang (Presenting Author); Jason Lodge (Co-Author); Cameron Brooks (Co-Author)

Exploring Challenges in Germany's VET System: Stakeholder Insights on Learning Location Cooperation (Single Paper)

Jana Schwede (Presenting Author); Dietmar Heisler (Co-Author); Christian Harteis (Co-Author)

Session P 24 16:00–17:30 Location: HS 03.01

# Mathematics Learning and Reasoning

Chair

Ina Alexandra Machura

Associations between Place Value Understanding Number Line Estimation in Primary School (Single Paper)

Moritz Herzog (Presenting Author)

Opportunities to learn flexible and adaptive strategy use in arithmetic (Single Paper) Marian Hickendorff (Presenting Author); Marc Van Zanten (Co-Author); Erika Schlatter (Co-Author); Tessa De Wil-Van der Woude (Co-Author); Anja Van der Voort (Co-Author)

Systematic Errors When Comparing Boxplots: The Role of Conceptual Knowledge About the Box Area (Single Paper)

Martin Abt (Presenting Author); Katharina Loibl (Co-Author); Timo Leuders (Co-Author); Frank Reinhold (Co-Author)

A metaphor for revealing the nature of mathematical procedural knowledge (Single Paper)

Christoph Ableitinger (Presenting Author); Christian Dorner (Co-Author); Jon Star (Co-Author)

<u>Session P 25</u> <u>16:00–17:30</u> Location: HS 15.02

# Perspectives on Teacher Learning and Professional Challenges

Chair

Louie Lei Wang

Teaching to write at tertiary level: teachers' beliefs in Teacher Education in Spain and Portugal (Single Paper)

Xavier Fontich (Presenting Author); Ana Luísa Costa (Co-Author); Dolors Masats (Co-Author)

Parents' Perceptions of Teacher Shortage and its Consequences. Results from Austria and Germany (Single Paper)

Romana Dorfer (Presenting Author); Denise Demski (Presenting Author); Christoph Helm (Co-Author); Tanja Aistleitner (Co-Author); Angelika Paseka (Co-Author)

Unraveling teacher knowledge and self-efficacy in a blended-learning PD on teachers' data use  $(Single\ Paper)$ 

Patrick Hawlitschek (Presenting Author); Sofie Henschel (Co-Author)

Flipped Learning Professional Development for Elementary Math Teacher Pedagogical Content Knowledge (Single Paper)

Ildze Čakāne (Presenting Author); Ilze France (Co-Author); Kārlis Greitāns (Co-Author)

Session P 26 16:00–17:30 Location: HS 01.15

# Learning and Development in Early Childhood

Chair

Nadine Scheller

Co-creating High-Quality Early Childhood Education: Insights from Families, Educators, and Children (Single Paper)

Icy Fresno Anabo (Presenting Author); Andrea Khalfaoui (Co-Author); Maite Santiago-Garabieta (Co-Author); Maria Padros Cuxart (Co-Author); Rocio Garcia-Carrion (Co-Author)

The Home Literacy Environment and Children's Linguistic Development Before and After School Entry  $(Single\ Paper)$ 

Astrid Wirth (Presenting Author); María Valcárcel Jiménez (Co-Author); Tina Schiele (Co-Author); Anna Mues (Co-Author); Efsun Birtwistle (Co-Author); Frank Niklas (Co-Author)

Supporting Early Maths Development in the Home Learning Environment with the 'Maths@Home' App (Single Paper)

Jo Van Herwegen (Presenting Author); Laura Outhwaite (University College London)

Exploring the Impact of Play on Children's Autonomy and Empathy Development (Single Paper)

Qiming Liu (Presenting Author)

# **Advancing Teacher Practices**

Chair

Tânia Moreira

Teachers' Pedagogical Decisions and Perceptions Following Discipline-Oriented Neuropedagogy Course (Single Paper)

Debora Marchak (Co-Author); Inna Shvarts-Serebro (Bar Ilan University)

The Role of Teacher Agency in Managing Teacher-Parent Conflicts in Marginalized Communities (Single Paper)

Hadeel Edrees Dabbah (Presenting Author); Dana Vedder-Weiss (Co-Author); Idit Fast (Co-Author)

How do clinical simulations promote perspective-taking in teacher PD discourse? (Single Paper)

Tal Meltz (Presenting Author); Dana Vedder-Weiss (Co-Author); Gideon Dishon (Co-Author)

DIN 33459: Introducing a standard-based quality management system in education (Single Paper)

Jonathan Biehl (Presenting Author); Rolf Koerber (Co-Author)

Session P 28	16:00–17:30	Location: HS 02.23
Science, Neuromyths, Gene	ler, and Creativity	
Speaker Jacqueline Wong	Fostering students' creativity: validating the Stud Migchiel Riemer van Diggelen (Presenting Author); Anne	` = - /
	Disparities in academic genre use at Romanian universities (Single Paper) Madalina Chitez (Presenting Author); Velibor Mladenovici (Co-Author); Mariana Crasovan (Co-Author); Kristian Miok (Co-Author); Daniel Luches (Co-Author)	
	What drives the neuromyths and neurofacts? Insiproach (Single Paper) Eric Klopp (Presenting Author); Robin Stark (Co-Author	
	Nature of Science: Exploring the inclusion in Kosovo's chemistry curriculum (Si	
	Paper) Arlinda Bytyqi-Damoni (Presenting Author); Saranda Kosumi (Co-Author); Albulena Metaj-Macula (University of Prishtina)	
General Assembly	17:30-17:45	Location: HS 62.01 Alumni-Hörsaal
General Assembly		
Policy Council	$17{:}45{-}18{:}15$	Location: HS 62.01 Alumni-Hörsaal
Policy Council		
Members Meeting	18:15–19:15	Location: HS 62.01 Alumni-Hörsaal
Members Meeting		
Conference Dinner at Nor Hotel	vapark 20:00–NA	
Conference Dinner at Novapark Hotel		

# FRIDAY, 29 AUGUST 2025

Session Q 01	09:30-11:00	Location: SR 15.45
Dession & OI	09.30-11.00	Docamon, Sit 19.49

## Misconceptions and Refutations in Learning and Revising Knowledge

Chair

Sarah Bichler

The Design and Implementation of Neuro-Consistent Strategies for Conceptual Change (Poster Presentation)

BOBBY HOFFMAN (Presenting Author)

Misconceptions of Elementary School Children on Fundamental Algorithmic Concepts (Poster Presentation)

Katrin Kunz (Presenting Author); Jana Wacker (Co-Author); Katerina Tsarava (Co-Author)

Psychological research findings do not elicit more hindsight bias than findings from other sciences (Poster Presentation)

Thomas Simacek (Presenting Author)

Persuasive Refutation Texts to Encourage Conceptual and Attitudinal Change (Poster Presentation)

Madeleine Müller (Presenting Author); Bernadette Gold (Co-Author); Isabell Tucholka (Co-Author)

A short digital intervention reduces highly prevalent misconceptions about multimedia learning (Poster Presentation)

Markus H. Hefter (Presenting Author)

The fragmented field of conceptual change research and the missing place of Developmental Teaching (Poster Presentation)

Thomas Gennen (Presenting Author)

The Role of Graphics in Refutation Texts on Higher Education Students' Knowledge Revision in Biology (Poster Presentation)

Leen Catrysse (Presenting Author); Hannie van der Honing (Co-Author)

Session Q 02 09:30–11:00 Location: LS 15.03

### Methods for Teaching and Research on Teachers

Speaker

Joanna Anderson

Simplifying research on teachers' visual expertise: Additions or alternatives for eye tracking (Roundtable)

Senne Van Hoecke (Presenting Author)

Seeing Under Stress: Training Effective Hazard Perception with Expert Eye Movements (Roundtable)

Christine van Nooijen (Presenting Author); Laura Hamran (Co-Author); Bjorn de Koning (Co-Author); Ellen Kok (Co-Author); Anna Isahakyan (Co-Author); Maryam Asoodar (Co-Author); Fred Paas (Co-Author)

Teaching Sensitive and Controversial Issues in Flemish Secondary Education: An ESM Study (Roundtable)

Virginie Lemmens (Presenting Author); Leonie Vanhove (Co-Author); Machteld Vandecandelaere (Co-Author); Jan Sermeus (Co-Author)

<u>Session Q 03</u> 09:30–11:00 Location: SR 15.42

### Teachers' Knowledge, Experiences and Practices

### Speaker Lena Nusser

Assessing Teachers' Intention to adopt digital technology: The Role of ICAP and Contextual Support (Poster Presentation)

Tabea Rosenkranz (Presenting Author)

The role of informal advice networks in the teaching practices of early-career university teachers (Poster Presentation)

David Castro Garcia (Presenting Author); Koen Lombaerts (Co-Author); Geert Vandermeersche (Co-Author); Jerich Faddar (Co-Author)

Student teachers' professional learning experience (Poster Presentation)

Maile Käsper (Presenting Author); Inge Timoštšuk (Co-Author); Anne-Mai Näkk (Co-Author)

Impact of a course co-design intervention on university teachers' TPACK technology-related knowledge (Poster Presentation)

Ha Nguyen (Presenting Author); Angeliki Mali (Co-Author); Jolien Mouw (Co-Author); Hanke Korpershoek (Co-Author); Jan-Willem Strijbos (Co-Author)

In their Own Words: Podcasting to support and investigate the communication of research by teachers (Poster Presentation)

Paul Howard-Jones (Presenting Author); Bethany Woollacott (Co-Author); Colin Foster (Co-Author); Natasha Guy (Co-Author)

Studying Prevocational Teachers' Dispositions towards Reading within Professional Development (Poster Presentation)

Soetkin Werbrouck (Presenting Author); Hilde Van Keer (Co-Author)

Session Q 04 09:30–11:00 Location: SR 15.48

### Challenges and innovations in educational research and practice

#### Chair

Frank Reinhold

Empowering problem-solvers: Elevating self-efficacy in Challenge-based Learning through a CBL canvas (Poster Presentation)

Selina Michel (Co-Author); Manuel Förster (Co-Author); Alexandra Ochs (Technical University of Munich)

Resilience as Factor for Development - an As-Is Analysis of Kindergarten Children (Poster Presentation)

Eva Frick (Presenting Author); Esther Moll (Co-Author)

Effects of a Cooperation Training on Inclusion-Related Self-Concepts of Pre-Service Teachers (Poster Presentation)

Jan R. Schulze (Presenting Author); Eva Blumberg (Co-Author); Frank Hellmich (Co-Author)

Effects of using VR training for skill development in the context of parent-teacher conferences (Poster Presentation)

Friederike Knabbe (Presenting Author); Yannik A. Escher (Co-Author); Hannes M. Petrowsky (Co-Author); David D. Loschelder (Co-Author); Poldi Kuhl (Co-Author)

How Wartime Shaped the Role and Perceptions of Music Educators in Elementary Schools (Poster Presentation)

Libby Azaryahu (Presenting Author)

Change Laboratories as a transformative methodology for educational research: a critical review (Poster Presentation)

Nick Hopwood (Presenting Author)

Session Q 05 09:30–11:00 Location: SR 15.13

### Relevance of Instructional approaches and materials

#### Chair

Xavier Fontich

Beyond the Pedagogical-Technological Divide: Addressing the Contextual Complexity (Roundtable)

Doris Kristina Raave (Presenting Author)

Materials of epistemic cognition (Roundtable)

Paul Sijpkes (Presenting Author); Simon Knight (Co-Author); Laura Allen (Co-Author); Varun Athilat (Co-Author); Kristine Deroover (Co-Author); Zhiqiang Amos Tay (Co-Author)

Designing exploratory play for under threes in center-based childcare (Roundtable) Mariska Venema (Presenting Author); Paul Leseman (Co-Author); Ora Oudgenoeg-Paz (Co-Author); Sui Lin Goei (Co-Author)

<u>Session Q 06</u> 09:30–11:00 Location: SR 15.43

### Learning and Competence in Different Domains

Measuring generalization competence (Poster Presentation)

Birgit Vogt (Presenting Author); Markus Linnemann (Co-Author)

Examining the Components and Correlations of Oral Reading Fluency Among Second-Grade Students (Poster Presentation)

Zsóka Sipos (Presenting Author); János Steklács (Co-Author); Nóra Huszár (Co-Author); Orsolva Kis (Co-Author)

Who is a good judge of what and when? Examining (student) teachers' judgment accuracy in reading (Poster Presentation)

Jacqueline Zielke (Presenting Author); Henrike Mentel (Co-Author); Mareike Ehlert (Co-Author); Natalie Foerster (Co-Author)

Letter-sound learning trajectories as an early predictor of reading potential in kindergartners (Poster Presentation)

Jurgen Tijms (Presenting Author); Milene Bonte (Presenting Author); Fiona Borska (Co-Author); Chiara Turri (Co-Author); Marjolein Tool (Co-Author); Rogier Kievit (Co-Author)

The impact of peer exclusion at school on cognitive functions and learning outcomes (Poster Presentation)

Giuseppe De Luca (Presenting Author); Dieter Baeyens (Co-Author); Martina Benvenuti (Co-Author); Friederike Blume (Co-Author); Gerrit Meixner (Co-Author); Tung Khau (Co-Author); Elvis Mazzoni (Co-Author)

Towards an aesthetics of grammar learning: lifting the veil on language (Poster Presentation)

Steph Ainsworth (Presenting Author); Huw Bell (Co-Author)

Session Q 07 09:30–11:00 Location: SR 15.33

Teacher perspectives on innovatIve approaches and advanced technological tools

Chair

Honghong Bai

Welcoming AI to School: Exploring Teachers' Perspective on Artificial Intelligence (Roundtable)

Christian Haider (Presenting Author)

Examining IB-DP mathematics teachers' conception of interdisciplinarity and their teaching approach (Roundtable)

Simge Akbal (Presenting Author); Fatma Aslan-Tutak (Co-Author)

Using Machine Learning to Predict Performance Using Pedagogical Agent Emotions in an ITS (Roundtable)

Matthew Moreno (Presenting Author); Ang Li (Co-Author); Tara Delegado (Co-Author); Roger Azevedo (Co-Author); Megan Wiedbusch (University of Central Florida)

Session Q 08 09:30–11:00 Location: SR 15.34

### STEM Learning in Different Settings

Chair

Crina Damsa; David Putwain

Digital tool for self- and socially shared regulation of learning in a STEAM module (Roundtable)

Jenni Latva-aho (Presenting Author); Essi Vuopala (Co-Author); Héctor J. Pijeira-Díaz (Co-Author); Kristiina Mänty (Co-Author); Piia Naykki (Co-Author)

 ${\bf Improve \ education \ for \ all:} \ \ {\bf Evidence\text{-}based \ development \ of \ inclusive \ schools} \ ({\bf Roundtable})$ 

Minna Törmänen (Presenting Author); Raisa Carpelan (Presenting Author); Monika Theresa Wicki (Co-Author)

Systematic Review on the Effectiveness of AI Tools in Special Education (Roundtable)

Run Wen (Presenting Author); Anoop Saxena (Presenting Author); Na Li (Co-Author); Rong Yan (Co-Author)

Session Q 09 09:30–11:00 Location: SR 15.32

### Mathematical Development and Learning

Chair

Jo Van Herwegen

The role of teacher and classroom characteristics in mathematics learning: A context analysis. (Roundtable)

Dieter Baeyens (Presenting Author)

Tracing mathematical development through longitudinal datasets: Challenges and solutions (Roundtable)

Laura Outhwaite (Presenting Author); Jo Van Herwegen (Co-Author)

Mathematics learning and learning difficulties in the Multilevel Supply-Use model LEVEL 0-1 (Roundtable)

Pirjo Aunio (Presenting Author)

Session Q 10 09:30–11:00 Location: HS 02.11

Students' regulation of goal setting and effortful goal pursuit across repeated learning episodes

Chair

Jasmin Breitwieser

Discussant

Eleftheria Gonida

Causal attributions determine how students regulate their goals and effort (Single Paper)

Jasmin Breitwieser (Presenting Author); Himang Choi (Co-Author)

Supporting University Students' Use of Distributed Practice during Self-Regulated Learning (Single Paper)

Louise David (Presenting Author); Felicitas Biwer (Co-Author); Rik Crutzen (Co-Author); Anique de Bruin (Co-Author)

Calibration feedback promotes accurate goal-related monitoring and adaptive goal revision (Single Paper)

Maria Theobald (Presenting Author); Garvin Brod (Co-Author)

Students' regulation of goal setting and effortful goal pursuit across repeated learning episodes (Symposium)

Applying Computational Modeling to Ascertain the Role of Emotions in Goal Setting and Performance (Single Paper)

Wy Ming Lin (Presenting Author); Lily FitzGibbon (Co-Author); Maria Theobald (Co-Author); Jasmin Breitwieser (Co-Author); Garvin Brod (Co-Author); Kou Murayama (Co-Author); Michiko Sakaki (Co-Author)

Session Q 11 09:30–11:00 Location: HS 02.21

Writing: a learning activity to construct knowledge and/or to improve writing profiency? Part 1

Chair

David Galbraith

Discussant

Lieke Holdinga

Organiser

Gert Rijlaarsdam

Writing: a learning activity to construct knowledge and/or to improve writing profiency? Part 1 (Symposium)

Synthesis tasks: Explaining the relation between text quality and experienced learning. (Single Paper)

Elke Van Steendam (Presenting Author); Nina Vandermeulen (Co-Author); Gert Rijlaarsdam (Co-Author)

Organization in Reasoning and Writing (Single Paper)

Alexandra List (Presenting Author)

Executive functions in a multiple-text task on depth of comprehension and argumentative quality (Single Paper)

Christian Tarchi (Presenting Author); Constanza Ruffini (Co-Author); Chiara Pecini (Co-Author)

Why do learning and writing conflict? (Single Paper)

David Galbraith (Presenting Author)

Session Q 12 09:30–11:00 Location: HS 15.13

### Unveiling Situational and Longitudinal Insights on Emotion, Motivation, and Well-being in Education

Chair Tanja Bross Discussant

Christoph Niepel

The Reciprocal Link Between Teachers' Well-Being, Teaching Quality and Students' Experiences (Single Paper)

Gyde Wartenberg (Presenting Author); Hui Wang (Co-Author); Uta Klusmann (Humboldt-University Berlin)

Teachers' Situation-Specific Emotion Regulation Strategies: A Multilevel Latent Profile Analysis (Single Paper)

Tanja Bross (Presenting Author); Anne Christiane Frenzel (Co-Author); Ulrike Nett (Co-Author)

Team Teachers' Regulation of Positive Emotions in Relation to Burnout From a Daily Perspective (Single Paper)

Franziska Muehlbacher (Presenting Author); Gerda Hagenauer (Co-Author); Tanja Held (Co-Author)

Unveiling Situational and Longitudinal Insights on Emotion, Motivation, and Wellbeing in Education (Symposium)

University Students' Situational Motivation and Anxiety: Within- and Between-Person Dynamics (Single Paper)

Henriikka Juntunen (Presenting Author); Markku Niemivirta (Co-Author); Jaana Viljaranta (Co-Author); Lars-Erik Malmberg (Co-Author); Auli Toom (Co-Author); Kati Vasalampi (Co-Author); Eija Räikkönen (Co-Author); Heta Tuominen (University of Eastern Finland)

Session Q 13 09:30–11:00 Location: HS 02.01

### Mathematics and Executive Functions: Integrating across methodological approaches.

Chair

Iro Xenidou-Dervou

Discussant

Sanne van der Ven

The role of Working Memory in Processing and Translating Between Numerical Representations. (Single Paper)

Iro Xenidou-Dervou (Presenting Author); Caroline Appleton (Co-Author); Serena Rossi (Co-Author); Natasha Guy (Co-Author); Camilla Gilmore (Co-Author)

The lack of an inhibition construct and its contributions to symbolic and non-symbolic arithmetic. (Single Paper)

Ilse Coolen (Presenting Author); Sixtine Omont-Lescieux (Co-Author); André Knops (Co-Author)

How do attentional processes contribute to new symbol learning? Insights from encephalography. (Single Paper)

Sophia Shatek (Presenting Author); Gaia Scerif (Co-Author); Bethan Grimes (Co-Author); Julia Dabrowska (Co-Author); Sylvia Gattas (Co-Author); Kylie Li (Co-Author); Wesley Moon (Co-Author); Annie Talbot-Ponsonby (Co-Author); Devashi Trivedi (Co-Author); Alex Fraser (Co-Author)

Mathematics and Executive Functions: Integrating across methodological approaches. (Symposium)

Math Anxiety and Executive Functions in Children's Mental Calculation With and Without Dyscalculia (Single Paper)

Rachele Lievore (Presenting Author); Sara Caviola (Co-Author); Irene C. Mammarella (Co-Author)

# Session Q 14 09:30–11:00 Location: HS 15.02

### AI in Teacher Training - Concepts, Potentials, and Challenges of Prompts and Feedback

Chair

Chengming Zhang

Discussant

Tim Fütterer

Organiser

Florian Hofmann

AI in Teacher Training – Concepts, Potentials, and Challenges of Prompts and Feedback (Symposium)

The role of AI in training teacher judgment accuracy (Single Paper)

Flavio Loetscher (Presenting Author); Stefan Keller (Co-Author)

 ${\bf ChatGPT\ \&\ Co:\ Feedback\ as\ a\ Use\ of\ Case\ for\ LLM's\ in\ Higher\ Education\ (Single\ Constraints)}$ 

Paper)

Lucas Jasper Jacobsen (Presenting Author); Kira Weber (Co-Author)

What is more effective? Impact of AI and Human Feedback on Reflections of Pre-

Service Teachers (Single Paper)

Florian Hofmann (Presenting Author); Chengming Zhang (Co-Author); Tina-Myrica Daunicht

(Co-Author); Lea Plößl (Co-Author); Michaela Gläser-Zikuda (Co-Author)

Comparing AI and Teacher Feedback on Pre-Service Mathematics Teachers' Sense

of Efficacy (Single Paper)

Chengming Zhang (Presenting Author); Min HU (Co-Author); Weidong Wu (Co-Author); Yanfen Chen (Co-Author); Kai Wang (Co-Author); Tianhang Gao (Co-Author); Xining Wang

(Co-Author)

# Session Q 15 09:30–11:00 Location: SR 15.15

### Learning in Practice and Transformative Learning

Chair

Giuseppe De Luca

Learning to Learn in practice: A Challenging Approach to Teacher Training (Roundtable)

Roberta Cardarello (Co-Author); Lucia Scipione (Co-Author); Agnese Vezzani (University of Modena and Reggio Emilia - Department of Education and Human Sciences)

Aesthetic Response in Literature Education: A Digital Storytelling Case Study on The Boy, the Mole, the Fox, and the Horse. (Roundtable)

Seyed Mohammad Momeni (Presenting Author)

How Can Humanities Perspectives Enhance Transformative Learning? (Roundtable) Christianne Smit (Presenting Author); Marije van Braak (Co-Author); Ingrid Hoofd (Co-Author); Rianne van Lambalgen (Co-Author); Imar de Vries (Co-Author)

# Session Q 16 09:30–11:00 Location: SR 15.44

### **Inclusive Education**

Chair Sonja Hahn Education for all? Rethinking Education for People with Disabilities (Poster Presentation)

Hajar Ouknider (Presenting Author)

Inclusive Higher Education for All: A Critical Case (Poster Presentation)

Özlem Özdemir (Presenting Author); Diler Oner (Co-Author)

Impact of Inclusive Education on Students' Academic Performance and Social Well-Being (Poster Presentation)

Camila Martinez (Presenting Author); Lucas Galanakis (Co-Author); Ricardo Rosas Diaz (Co-Author)

Data use for school self-evaluation - the process, factors, and leadership practises in Estonia (Poster Presentation)

Kätlin Vanari (Presenting Author); Daniel Reinaru (Co-Author); Eve Eisenschmidt (Tallinn University)

How do mainstream teachers in China support inclusion in classes with diverse needs? (Poster Presentation)

Ping Dong (Presenting Author)

Inclusion of blind students in Slovenia: teachers' perceptions (Poster Presentation) Cirila Peklaj (Presenting Author); Tanja Turicnik (Co-Author)

Session Q 17 09:30–11:00 Location: HS 15.14

# Exploring (Student) Teachers' Agency in Developing Research Competence within Educational Contexts

### Chair

Julia Raberger

Discussant

Dominik E. Froehlich

Organiser

Carla Quesada-Pallarès

Collaborative Online Workshops for Kenyan Doctoral Students Who are Teacher-Researchers (Single Paper)

Emmanuel Manalo (Presenting Author); Damaris KARIUKI (Co-Author); Mukirae NJIHIA (Co-Author); Wilson MUTUMA (Co-Author); Yukari Abe (Co-Author); Yu-Jr Lan (Kyoto University)

Exploring (Student) Teachers' Agency in Developing Research Competence within Educational Contexts (Invited Symposium)

Navigating ethical considerations in educational research: A scoping review (Single Paper)

Carla Quesada-Pallarès (Presenting Author); Anna Ciraso-Calí (Co-Author); Angelina Sánchez-Martí (Co-Author); Georgeta Ion (Co-Author); Aimie Brennan (Co-Author); Darren Byrne (Co-Author); Allan-Baez Contreras (Universitat Autonoma de Barcelona)

Enhancing Teachers' Research Capacity in Japan: Beyond Lesson Study through Equal Collaboration (Single Paper)

Yuri Uesaka (Presenting Author); Nao Uchida (Co-Author); Yu Mizuno (Co-Author); Mai Tamano (Co-Author); Shigeru Yanagimoto (Co-Author)

Teacher Agency in Equitable Research-Practice Partnerships: Motivations, Barriers, Benefits (Single Paper)

Julia Raberger (Presenting Author); Dominik E. Froehlich (Co-Author); Eleni Stamouli (Co-Author)

Session Q 18 09:30–11:00 Location: HS 15.03

Symposium: Rethinking grade retention: A multifaceted exploration of predictors of grade retention

Chair Mieke Goos Discussant

Natalie Nóbrega Santos

Why do ethnic minorities have a higher likelihood of grade retention in Flemish secondary schools? (Single Paper)

Joke Vanbrabant (Presenting Author); Timo Van Canegem (Co-Author); Mieke Goos (Co-Author)

School and system-level determinants of grade retention: A cross-national multi-level study (Single Paper)

Janneke Pepels (Presenting Author); Barbara Belfi (Co-Author); Mieke Goos (Co-Author); Carla Haelermans (Co-Author)

Grade retention and differentiated instruction: Investigating teachers' beliefs and practices (Single Paper)

Francisco Peixoto (Co-Author); Joana Pipa (ISPA - Instituto Universitário | Center for Research in Education); Sérgio Gaitas (ISPA-Instituto Universitário / CIE - ISPA (Center for Research in Education))

Symposium: Rethinking grade retention: A multifaceted exploration of predictors of grade retention (Invited Symposium)

From student traits to school structures: A multilevel perspective on predictors of grade retention (Single Paper)

Paul Fabian (Presenting Author); Benjamin Gröschl (Co-Author); Florian Klapproth (Co-Author); Katja Scharenberg (Ludwig Maximilian University Munich)

Session Q 19 09:30–11:00 Location: HS 01.22

Empowering Teachers with Actionable Insights: Data-Driven Dashboards for Effective Teaching

Chair

Sarah Bichler **Discussant**Clara Schumacher

Navigating Learning with AI: Teachers' and Students' Perspectives on AI Monitoring in the Classroom (Single Paper)

Tomohiro Nagashima (Presenting Author); Niklas Scholz (Co-Author); Lisa Siegrist (Co-Author); Shintaro Sato (Co-Author)

Teacher Strategies for Deriving Actionable Insights from NLP Dashboards to Respond to Student Ideas (Single Paper)

Sarah Bichler (Presenting Author); Libby Gerard (Co-Author); Brian Riordan (Co-Author); Jonathan Lim-Breitbart (Co-Author); marcia linn (Co-Author)

Teacher Dashboard Design: Enhancing Metacognitive Feedback and Students' Self-regulated Learning (Single Paper)

Susan Verbunt-Janssen (Presenting Author); Inge Molenaar (Presenting Author); Carolien Knoop-van Campen (Co-Author); Martine Baars (Co-Author)

Empowering Teachers with Actionable Insights: Data-Driven Dashboards for Effective Teaching (Symposium)

Teachers' data literacy to use digital dashboards: Gaps in current data literacy tests (Single Paper)

Stefanie Vanbecelaere (Presenting Author); Manel van Kessel (Co-Author); Bert Reynvoet (Co-Author); Nadira Saab (Co-Author); Fien Depaepe (Co-Author)

# Session Q 20 09:30–11:00 Location: HS 02.23

### Teacher Ideals, Identity and Experiences

Chair

Esther Adi-Japha

Pre-service teachers' meaningful life stories as makers of identities and professional development (Single Paper)

Anne Martin (Presenting Author); Emma Kostiainen (Co-Author)

Flexibility in teachers' conceptions: The adaptive use of assessment metaphors (Single Paper)

Katarina Gvozdic (Presenting Author); NAUD Stéphanie (Co-Author); Walther Tessaro (Co-Author)

Making Finnish preservice teachers professional identity development visible by visual methods (Single Paper)

Solveig Cornér (Presenting Author); Hannah Kaihovirta (Co-Author)

Changing Educational Ideals: A Longitudinal Study of Austrian and Finnish Pre-Service Teachers (Single Paper)

Eeva Kaisa Hyry-Beihammer (Presenting Author); Katriina Maaranen (Presenting Author); Katariina Stenberg (Co-Author); Jan Boehm (Co-Author); Heidi Krzywacki (Co-Author)

<u>Session Q 21</u> 09:30–11:00 Location: SR 15.22

### Adaptive Teaching, Teaching Quality and Personalized Learning

Chair

Jonne Bloem

A Systematic Review of AI in Personalized Learning: Focus on traits, states, and outcome measures (Roundtable)

Ina Alexandra Machura (Presenting Author); Maria Zirenko (Co-Author); Iuliia Pliushch (Co-Author)

Pre-Service Teachers Who Start Teaching Early: Characteristics, Study Progress, and Teaching Quality (Roundtable)

Mahdieh Vaziri (Presenting Author); Nele Kampa (Co-Author); Roman Zviagintsev (Co-Author)

Marie Pauline Godow (Presenting Author); Marlit Annalena Lindner (Co-Author)

Session Q 22 09:30–11:00 Location: HS 15.05

### New insights in the research field on core numerical skills in early childhood

Chair Heidi Harju Discussant Ann Dowker Organiser Jo Van Hoof New insights in the research field on core numerical skills in early childhood (Symposium)

Numerical skills in 3- to 4-year-olds: A test-retest study (Single Paper)

Hanna Weiers (Presenting Author); Sohnia Ghattaura (Co-Author); Camilla Gilmore (Co-Author); Francesco Sella (Co-Author)

Early Math Skill Profiles at the Age of 2.5 Years: A Person-Oriented Approach (Single Paper)

Jarno Rautiainen (Presenting Author); Minna Torppa (Co-Author); Jenni Salminen (Co-Author); Tuija Aro (Co-Author); Tuire Koponen (Co-Author)

A one-year follow-up of numerical ordering skills in 4 -year-old children (Single Paper)

Heidi Harju (Presenting Author); Jo Van Hoof (Co-Author); Jake McMullen (Co-Author); Eero Laakkonen (Co-Author); Cristina Nanu (1 Decembrie 1918 University of Alba Iulia); Minna Hannula-Sormunen (University of Turku)

A longitudinal investigation of the errors four- to six-year-olds make on repeating patterning tasks (Single Paper)

Nore Wijns (Presenting Author); Bert De Smedt (Co-Author); Lieven Verschaffel (Co-Author); Joke Torbeyns (Co-Author)

Session Q 23 09:30–11:00 Location: HS 11.03

### Verbal and numerical intelligence and achievements: How do they relate to self-beliefs?

Chair

Aljoscha Neubauer

Verbal and numerical intelligence and achievements: How do they relate to self-beliefs? (Symposium)

Mathematical Talent or just General Cognitive Abilities? (Single Paper)

Michaela A. Meier (Presenting Author); Roland H. Grabner (Co-Author)

Interest and Boredom in Math and German: A Longitudinal Reciprocal Effect Study (Single Paper)

Franzis Preckel (Presenting Author); Katharina Boehme (Co-Author); Markus Feuchter (Co-Author); Thomas Goetz (Co-Author)

Predictors of language and math grades: Domain-specific self-concept and perceived intelligence (Single Paper)

Gabriela Hofer (Presenting Author); Manuel Baumgartner (Co-Author); Aljoscha Neubauer (Co-Author)

Math and Verbal IQ Scores and School Achievements Predict Math and Verbal Self-Evaluations (Single Paper)

Marlene Wunberg (Presenting Author); Ricarda Steinmayr (Co-Author); Jens Möller (Co-Author)

<u>Coffee Break</u> 11:00–11:30

Coffee Break

**KEYNOTES - PART 3 01** 

11:30-13:00

Location: HS 62.01 Alumni-Hörsaal

Empowering Learners for the Future: Advancing Flourishing through Socio-moral Development

Chair

Eleftheria Gonida

Empowering Learners for the Future: Advancing Flourishing through Socio-moral

**Development** (Keynote)

Eveline Gutzwiller-Helfenfinger (Presenting Author)

**KEYNOTES - PART 3 02** 

11:30-13:00

Location: Aula

Intrinsic Rewards: A key idea for motivation and self-regulation

Chair

Intrinsic Rewards: A key idea for motivation and self-regulation (Keynote)

Stephan Vogel

Kou Murayama (Presenting Author)

**KEYNOTES - PART 3 03** 

11:30-13:00

Location: HS 12.11

Location: HS 12.01

Multiple document literacy: Past, present, and prospects.

Chair

Lucia Mason

Multiple document literacy: Past, present, and prospects. (Keynote)

Ivar Bråten (University of Oslo)

Session R 01 13:15–14:45

Fostering Beliefs, Skills and Achievement Goals

Chair

Jörn Sparfeldt

Learning about Sustainability in Construction at the Intersection of Digital and

Tangible (Single Paper)

Živa Simšič (Presenting Author); Anna Keune (Co-Author)

Longitudinal Interplay of Achievement Goal Orientations and Academic Performance in Adolescence (Single Paper)

Rasa Erentaitė (Presenting Author); Rimantas Vosylis (Co-Author)

Improving Reading and Mathematical skills through an integrated intervention: A Randomized Trial (Single Paper)

Vibeke Rønneberg (Presenting Author); Anita Lopez-Pedersen (Presenting Author); Tonje Amland (Co-Author); Oddny Judith Solheim (Co-Author); Monica melby-lervåg (University of Oslo)

Fostering beliefs and intention regarding making activities through autonomy and utility-value (Single Paper)

Sophie Uhing (Presenting Author); Stephan Kroener (Co-Author)

Session R 02 13:15–14:45 Location: HS 01.15

### Critical look at Technological Advancements in Education

Chair

May Janne Sandblåst Husevåg

The influence of digital slide accessibility: Considering note-taking and working memory (Single Paper)

Hyeyoun Kim (Presenting Author)

Reviewing the Modality and Signaling Principles in AR and VR – Little research and limited effect? (Single Paper)

Rabea Bödding (Presenting Author); Günter W. Maier (Co-Author)

World Atlas of Research on Motivation in Education (WARME): A call to the field (Single Paper)

Aline Alves-Wold (Presenting Author)

Enhancing learning via Head-Mounted Augmented Reality:The Role of Motivation and Design Optimization (Single Paper)

Alberto A.P. Cattaneo (Presenting Author); Vito Candido (Co-Author)

Session R 03 13:15–14:45 Location: HS 02.23

### Early Childhood and Parental Engagement

Chair

Ethan Rubin

Teachers' Perceptions of Children Learning Engagement in Pre-primary Music Lessons (Single Paper)

Heddi Reinsalu (Presenting Author); Inge Timoštšuk (Co-Author); Inkeri Ruokonen (Co-Author)

Parental Homework Support and Teacher Bias: Uncovering Assumptions in Academic Judgments (Single Paper)

Janina Dickert (Presenting Author); Sabine Glock (Co-Author)

The causal effect of attending different ECEC modalities on Child Development (Single Paper)

Benjamin Lam (Presenting Author); Venta Terauds (Co-Author); Sally Brinkman (Co-Author)

Parents Constructing and Challenging the Ideals of Home-School Partnership (Single Paper)

Minna Palmu (Presenting Author); Katarina Perander (Co-Author); Sanni Pöysä (Co-Author); Noona Kiuru (Co-Author); Eija Pakarinen (Co-Author)

Session R 04 13:15–14:45 Location: HS 15.11

### **Understanding Achievement Across Contexts**

### Chair Paul Ginns

Transition to upper secondary education - Finnish students participating in PISA2022 (Single Paper)

Meri Lintuvuori (Presenting Author); Mari-Pauliina Vainikainen (Presenting Author); Ninja Hienonen (Co-Author)

Stability of Teacher Effectiveness: Insights from Tracking in Switzerland. (Single Paper)

Franck Petrucci (Presenting Author); Pascal Bressoux (Co-Author); Bruno Suchaut (Co-Author)

Examining Complex Relations of Environmental Resources and Achievement Using Deductive Data Mining (Single Paper)

Benjamin Matthes (Presenting Author); Tobias Debatin (Co-Author); Heidrun Stoeger (Co-Author); Albert Ziegler (University of Erlangen-Nuremberg)

Disciplinary differences in students' motivation – Investigating SEVT in higher education (Single Paper)

Jonas Breetzke (Presenting Author); Theresa Wenker (Co-Author); Carla Bohndick (Co-Author)

Session R 05 13:15–14:45 Location: HS 11.02

# Supporting Teacher Learning and Development

#### Chair

Mareike Brehmer

A Pedagogical Model for the Promotion of Student Teachers' Professional Vision Skills (Single Paper)

Maikki Pouta (Presenting Author); Olli-Pekka Heinimäki (Co-Author); Erno Lehtinen (Co-Author)

Research-informed professional literature as development activity? Using PISA 2022 teacher data (Single Paper)

Franziska Locher (Presenting Author); Dimitra Kolovou (Co-Author); Jan Hochweber (Co-Author)

Evaluating actionable recommendations for a teacher Learning Analytics Dashboard (Single Paper)

Daný de Vries (Presenting Author); Heleen Pennings (Co-Author); Linsey Roijendijk (Co-Author)

Analysing structures of pre-service teachers' knowledge integration with concept maps (Single Paper)

Anna-Lena Molitor (Presenting Author); Judith Schellenbach-Zell (Co-Author); Ulrike Hartmann (Co-Author)

Session R 06 13:15–14:45 Location: SZ 15.21

### Interventions in preschool and primary school

Chair Camilla Illy What aspects of class composition influence first graders' spelling skills? (Single Paper)

Christoph Weber (Presenting Author); Martin Schöfl (Co-Author)

Serial order effect on originality and fantasy in preschoolers' solutions to problems (Single Paper)

Joris Van Elsen (Presenting Author); Leen Catrysse (Co-Author); Sven De Maeyer (Co-Author)

Collaborating for gifted students with complex educational needs (Single Paper) Mare van Hooijdonk (Presenting Author); Marjolijn van Weerdenburg (Co-Author); Evelyn Kroesbergen (Co-Author)

Interventions supporting early self-regulation: a systematic literature review (Single Paper)

Antonia Zachariou (Presenting Author)

Session R 07 13:15–14:45 Location: HS 05.12

### Cognitive, Language and Text Comprehension Development

Chair

Idwer Doosje

Effects of multiage grouping on children cognitive development in urban and rural settings  $(Single\ Paper)$ 

Felipe Andrade (Presenting Author); Mariane Campelo Koslinski (Co-Author); Anita Toshie Nakamura Caldeira (Co-Author); Beatriz Souza Barral (Co-Author); Tiago Bartholo (Co-Author)

The Development of Arab Students' Multiple Text Integration Competence from Fourth to Eighth Grade (Single Paper)

Ibtisam Kaadan (Presenting Author); Sarit Barzilai (Co-Author)

Does the relationship between executive functions and L2 writing depend on language proficiency? (Single Paper)

Lisa Haake (Presenting Author)

Home Literacy Environment Profiles and Associations with Children's Language Outcomes (Single Paper)

JUNYI YANG (Presenting Author); Siri Steffensen Bratlie (Presenting Author); Wenjie Zhang (Co-Author)

Session R 08 13:15–14:45 Location: SR 15.48

### Student Diversity, Needs and Achievement Emotions

#### Chair

Mei-Shiu Chiu

Develop a questionnaire to uncover engineering students' needs and improve the quality of teaching (Poster Presentation)

Elisa Guasconi (Presenting Author); Ira Vannini (Co-Author); Luca Mantecchini (Co-Author)

Policy and Prestige: How do Elite Universities Respond Differently to National Policies? (Poster Presentation)

Benjamin Hart (Presenting Author)

Student Diversity and Its Impact on Learning Behavior and Success in a Flipped Classroom Model (Poster Presentation)

Theresa Bauer (Presenting Author); Manuel Förster (Co-Author)

Higher Education Examination Feedback and Student Achievement Goals: A Randomized Field Experiment (Poster Presentation)

Victoria Jacobi (Presenting Author); Michael Schneider (Co-Author)

Mapping the Geography of Transnational Higher Education in China (Poster Presentation)

Yan WANG (Presenting Author)

Personality Antecedents of Achievement Emotions: Sex Differences in Italian Middle School Students (Poster Presentation)

Giada Vicentini (Presenting Author); Roberto Burro (Co-Author); Daniela Raccanello (Co-Author)

Session R 09 13:15–14:45 Location: HS 15.02

# Reasoning and Argument Evaluation Across Contexts

#### Chair

Zuzana Bílková

Public Trust in Science: Educational Implications from a Systematic Review (Single Paper)

Kalypso Iordanou (Presenting Author)

Situated Epistemic Beliefs about Controversial Issues Predict Multiple Source Use Behaviours (Single Paper)

Eric Schoute (Presenting Author)

Utilizing an LLM for Automated Detection of Transactivity by Classifying Reference and Novelty (Single Paper)

David Otten (Presenting Author); Pantelis M. Papadopoulos (Co-Author); Maryam Amir Heari (Co-Author); Maaike Endedijk (Co-Author)

The relationship between knowing about and evaluating arguments: A cross-national study (Single Paper)

Irene Anna Diakidoy (Presenting Author); George Spanoudis (Co-Author); John McGuire (Co-Author)

Session R 10 13:15–14:45 Location: HS 15.06

### Examining Pre-Service Teacher Characteristics and Impact

### Chair Xian Liu

Factors Explaining Pre-Service Teachers' Intentions to Implement Adaptive Teaching Strategies (Single Paper)

Jennifer Paetsch (Presenting Author); Angela Anderka (Co-Author)

Enhancing Pre-service Teachers' Self-Efficacy to Teach Online Credibility Evaluation (Single Paper)

Elina K. Hämäläinen (Presenting Author); Pirjo Kulju (Co-Author); Christian Tarchi (Co-Author); Carita Kiili (Co-Author)

Pre-service teachers' self-efficacy for collaborative practices during their first field practice (Single Paper)

Tine Nielsen (Presenting Author); Emma Heise Nielsen (Co-Author); Laura Schou Jensen (Co-Author); Morten Pettersson (Co-Author); Dag Munck Lindemann1 (Co-Author); Line Toft (Co-Author)

Session R 11 13:15–14:45 Location: HS 44.11

### Technology-Enhanced Learning and Instruction

#### Chair

Mohammadreza Farrokhnia

Navigating the Role of ChatGPT in Mathematics Education: Insights from a Scoping Review (Single Paper)

Phuong Bui (Presenting Author); Nonmanut Pongsakdi (Co-Author); Jake McMullen (Co-Author); Marjaana Veermans (Co-Author)

A meta-analysis of anatomy knowledge gain via digital or real human bodies (Single Paper)

Christa Maurer (Presenting Author); Simone Manhal (Co-Author); Joanna Tomlinson (Co-Author); Niels Hammer (Co-Author)

Intelligent Tutoring Systems for K-12 Mathematics - A review of educational use and implementation (Single Paper)

Jun Song Huang (Presenting Author); Min Lee (Co-Author); Timothy Lee (Co-Author); Janice Lam (Co-Author)

What predicts students' collaborative problem solving in online environment? (Single Paper)

Päivi Häkkinen (Presenting Author); Shupin Li (Co-Author); Jarkko Hautala (Co-Author); Johanna Pöysä-Tarhonen (Co-Author); Susannah Otieno-Leppänen (Co-Author); Paavo Leppänen (Co-Author)

# Session R 12 13:15–14:45 Location: HS 46.01

### Advancing Digital Literacy Across Diverse Contexts

Enhancing Parent Mediation in Digital Reading for Children at Risk of Specific Learning Disorder (Single Paper)

Adina Shamir (Presenting Author); Dvora Menachem (Presenting Author)

Exploring Engagement and Motivation Profiles of Chinese L1 Leaners across Reading Modalities (Single Paper)

Jialin Li (Presenting Author); Xinhua Zhu (Co-Author); Siyu Zhu (The Hong Kong Polytechnic University)

Comparing AI and Expert Feedback in Mixed Reality Simulations for Teacher Education (Single Paper)

Marcus Samuelsson (Presenting Author); Evgeniia Efimova (Co-Author); Per-Olof Hansson (Co-Author); Thomas Nygren (Co-Author); Steven Monroe Bachelder (Co-Author)

Modeling Information Problem Solving with Generative AI: A Framework for Higher Education  $({\rm Single~Paper})$ 

Josien Boetje (Presenting Author); Stan van Ginkel (Co-Author)

# <u>Session R 13</u> 13:15–14:45 Location: HS 15.12

### Teacher Collaboration and Education Quality

### Chair XINYU LI

Success Teams and the Pre and Post-COVID-19 On-Track to Graduation Status of Students in Oregon, USA (Single Paper)

Keith Zvoch (Presenting Author)

Assessing the Quality of Kindergartens in Hong Kong: A Psychometric Validation Study of ECERS-R (Single Paper)

Echo LI (Presenting Author); Christine Wang (Co-Author); Yasmin Fong (Co-Author); Kerry Lee (Co-Author)

Equity Funding Policies to Reduce Educational Inequalities? Practices and Policymakers' Rationales  $({\rm Single~Paper})$ 

Denise Demski (Presenting Author); Sarah Eiden (Co-Author); Gabriele Bellenberg (Co-Author)

Teacher Collaboration: The Role of Task Types and Special Needs Teachers in Everyday Collaboration (Single Paper)

Flurin Gotsch (Presenting Author); Beat Rechsteiner (Co-Author); Andrea Wullschleger (Co-Author); Miriam Compagnoni (Co-Author); Katharina Maag Merki (Co-Author)

# Session R 14 13:15–14:45 Location: HS 01.14

### Adaptive teaching, student competecies and emotions

Chair

HELEN MARGARITOU-ANDRIANESSI

Socialization of young children's emotions: Practices from the field (Single Paper) Sabiha Üzüm (Presenting Author); Yesim Capa Aydin (Co-Author)

How to deal with religious conflicts? Exploring judgement competence of pupils in RE  $(Single\ Paper)$ 

Frederike Gabelt (Presenting Author)

Student's perceptions on new work and future learning: Do we need new approaches in education? (Single Paper)

Silvia Lipp (Presenting Author); Elisabeth Riebenbauer (Presenting Author); Christian Stutzenstein (Co-Author); Michaela Stock (Co-Author)

Assessing Differentiation in All Phases of Teaching: Properties and Quality of the ADAPT-instrument (Single Paper)

Marieke van Geel (Presenting Author); Trynke Keuning (Co-Author); Marjoleine Dobbelaer (Co-Author); Cees Glas (Co-Author)

### Session R 15 13:15–14:45 Location: HS 11.01

### Controversial Issues, Argumentation, and Feedback

Chair

Fiona Boylan

Personalised animated and written feedback in assessment tasks (Single Paper) Sanna Oinas (Presenting Author)

Shared book reading as a window of opportunity for preschool children's argumentation (Single Paper)

Jarmila Bubikova-Moan (Presenting Author); Veslemøy Rydland (Co-Author); Vibeke Grøver (Co-Author)

Effects of Structured Formative Peer Feedback and Self-Assessment on Argumentative Writing in EFL (Single Paper)

Alina Lira Lorca (Presenting Author); Katrin Peltzer (Co-Author); Vera Busse (Co-Author); Ulrike-Marie Krause (Co-Author)

Intervention Study Fostering Decision-Making in Controversial Issues about Sustainable Development (Single Paper)

Judith Niedecker (Presenting Author); Sabine Manzel (Co-Author)

# Session R 16 13:15–14:45 Location: HS 01.22

### Instructional Design for Learning

#### Chair

Charles Selorm Dzormeku

The Effects of Signaling the Thematic Independence and Irrelevance of Seductive Details (Single Paper)

Lukas Wesenberg (Presenting Author); Felix Krieglstein (Co-Author); Günter Daniel Rey (Co-Author); Sascha Schneider (University of Zurich); Sebastian Jansen (Technische Universität Chemnitz)

Improving Student Presentation Skills in Higher Education with a Blended Learning Environment (Single Paper)

Noell Röhrig (Presenting Author); Zoë Matas (Co-Author); Julia Sanduloff (Co-Author); Laura Litke (Co-Author); Felix Kunz (Co-Author); Felix Neckerauer (Co-Author); Alina Sprau (Co-Author); Paula Vogel (Co-Author); Michael Schneider (Co-Author)

Additivity of social cues. Analyzing verbal personalization and visual anthropomorphism in learning (Single Paper)

Tanja Habermeyer (Presenting Author); Nadine Scheller (Co-Author); Sascha Schneider (University of Zurich)

Development of basic needs experience and finance-related attitude through game-based learning (Single Paper)

Liane Platz (Presenting Author); Michael Juettler (Co-Author)

Session R 17 13:15–14:45 Location: HS 25.11

# AI, Automatization and Challenges in Higher Education

#### Chair

Ilona Friso-van den Bos

Teaching in an antagonistic age: Experiences from Swedish higher education (Single Paper)

Fredrik Portin (Presenting Author)

Use of AI as an epistemic tool for academic writing: An intervention for postgraduate students (Single Paper)

Marina García-Morante (Presenting Author); Mariona Corcelles-Seuba (Co-Author); Anna Sala Bubaré (Co-Author); Andrea Miralda-Banda (Co-Author)

Artificial intelligence (AI) literacy in teacher education: Review (Single Paper) WEIQI LIU (Presenting Author); Jiahong Su (Co-Author); Samuel Chu (Co-Author)

Developing automatic analysis of dialogic argumentation in mathematics and physics (Single Paper)

Sami Lehesvuori (Presenting Author); Markus Hähkiöniemi (Co-Author); Sebastian Tapia (Co-Author); Ville Heilala (Co-Author); Roberto Araya (Co-Author); Raija Hämäläinen (Co-Author)

Session R 18 13:15–14:45 Location: Festsaal

Teacher education, professional development, instruction quality and universal design for learning

Chair

Carmen Zurbriggen

Culturally Responsive Early Science Education—Professional Development of Bedouin Minority Teachers (Single Paper)

Ornit Spektor-Levy (Presenting Author); Idit Shaul (Co-Author)

Beyond rhetoric in teacher education for democratic citizenship: Insights from a developing context (Single Paper)

Blerim Saqipi (Presenting Author); Arian Musliu (Co-Author); Blerta Perolli-Shehu (Co-Author)

Operationalizing Universal Design for Learning in Higher Education: A Scoping Review (1998–2024) (Single Paper)

Ning REN (Presenting Author); Gary Yu-Hin LAM (Co-Author); Yi Wang (Co-Author); Ronnel Bornasal King (Co-Author); Vivian Wing Yan LEE (Co-Author)

 $\begin{tabular}{ll} \textbf{Domain-specific teacher self-efficacy and process quality in German ECEC - a multi-level study (Single Paper)} \end{tabular}$ 

Sina Fackler (Presenting Author)

Session R 19 13:15–14:45 Location: HS 15.04

### Social Dimensions of Learning

#### Chair

Narges Ranginkaman

The Dyadic Nature of Student-Teacher Relationships and Their Association with Academic Self-Concept (Single Paper)

Mirna Šumatić (Presenting Author); Lars-Erik Malmberg (Co-Author); Eija Pakarinen (Co-Author); MARJA-KRISTIINA LERKKANEN (Co-Author)

Conceptual and Methodological Considerations for Qualitative Feedback Literacy Research (Single Paper)

Martijn Leenknecht (Presenting Author); Juuso Henrik Nieminen (Co-Author); Renske de Kleijn (Co-Author); Judith Gulikers (Co-Author)

Balancing Achievement and Engagement: Providing Support in Socially Disadvantaged Schools (Single Paper)

Jana Obrovská (Presenting Author); Martin Majcík (Presenting Author)

Student-experienced resources of agency in constructing agentic positioning in university studies (Single Paper)

Maarit Arvaja (Presenting Author); Päivikki Jääskelä (Co-Author)

# Session R 20 13:15–14:45 Location: HS 11.03

### Cognitive Skills and School Performance

#### Chair

Sabrina Bacher

The impact of multi-talker babble noise on children's verbal working memory (Single Paper)

Gaia Spicciarelli (Presenting Author); Flavia Gheller (Co-Author); Barbara Arfé (Co-Author)

Conceptual and procedural knowledge of fraction arithmetic (Single Paper)

Josetxu Orrantia (Presenting Author); Paula Muñoz (Co-Author); Rosario Sánchez (Co-Author); Laura Matilla (Co-Author); Santiago Vicente (Co-Author); David Munez (Co-Author)

The ratio processing system and its role in fraction understanding (Single Paper) Josetxu Orrantia (Presenting Author); Paula Muñoz (Co-Author); Rosario Sánchez (Co-Author); Laura Matilla (Co-Author); Santiago Vicente (Co-Author); David Munez (Co-Author)

ANS, mapping, and working memory as predictors for mathematical competencies in primary school (Single Paper)

Vroni Hischa (Presenting Author); Frank Niklas (Co-Author)

# Session R 21 13:15–14:45 Location: HS 02.11

### Advanced Methods for Examining Learning Processes

#### Chair

Kukka-Maaria Polso

Eye-tracking study of feedback and signaling in learning ecosystems in immersive virtual reality (Single Paper)

Jean-Michel Boucheix (Presenting Author); Noé Monsaingeon (Co-Author); Stéphane Argon (Co-Author); Julien Ryard (Co-Author); Jean-Luc Martinez (Co-Author)

Improving Course Performance with a Brief Learning Resources Intervention (Single Paper)

Lara van Peppen (Presenting Author); Peter Verkoeijen (Presenting Author); Marloes Broeren (Presenting Author); Gabriela Koppenol-Gonzalez (Co-Author); Janneke Nobelen (Co-Author); Arends Lidia (Co-Author); Marleen de Moor (Co-Author); Marion Tillema (Co-Author); Renske Kuijpers (Co-Author); Anita Heijltjes (Co-Author)

Can we uncover reading strategies with webcam-based eye-tracking? Yes, We-cam! (Single Paper)

Ellen Kok (Presenting Author); Carolien Knoop-van Campen (Co-Author)

Examining the Role of Personality on Note-Taking Behaviors while Learning with MetaTutor (Single Paper)

Cameron Marano (Presenting Author); Megan Weidbusch (Co-Author); Annamaria Brosnihan (Co-Author); Tara Delegado (Co-Author); Milla Sherman (Co-Author); Roger Azevedo (Co-Author)

Session R 22 13:15–14:45 Location: HS 02.01

# Learning and Assessment in Higher and Teacher Education

#### Chair

Tiina Törmänen

Emotion and Reflection in Analysing Functional and Dysfunctional Videos in Preservice Teachers (Single Paper)

Anne Schlosser (Presenting Author); Jennifer Paetsch (Co-Author)

Effects of AI course attendance on pre-service teachers' AI competencies: A longitudinal analysis (Single Paper)

Stanley Schilling-Friedemann (Presenting Author); Roland Happ (Co-Author); Josef Guggemos (Co-Author); Michel Meß (Co-Author)

Opportunities for Artificial Intelligence in Higher Education: A Review of Qualitative Evidence  $({\rm Single\ Paper})$ 

Sarah Howard (Presenting Author); Jo Tondeur (Co-Author); Richard Boehme (Co-Author); Charlotte Neubert (Co-Author); Jonas Hauck (Co-Author)

Automated Assessment of Teachers' Professional Vision in Written Classroom Reflections (Single Paper)

Tim Fütterer (Presenting Author); Manuel Hopp (Co-Author); Kathleen Stürmer (Co-Author); Richard Göllner (University of Potsdam)

Measuring Outcomes of Initial Teacher Education: The Multidimensionality of Teachers' Competence (Single Paper)

Jonas Weyers (Presenting Author); Kristina Gerhard (Co-Author); Johannes König (Co-Author)

Session R 23 13:15–14:45 Location: HS 02.21

### Social Support and Interaction in the Classroom

# Chair

Inge Van der weijden

Learners making meaning of complex emotion using 'Science of Learning' perspectives (Single Paper)

Kate Ippolito (Presenting Author); Iro Ntonia (Co-Author)

How does social support influence the stability and change of students' study well-being profiles? (Single Paper)

Sanna Ulmanen (Presenting Author); Lotta Tikkanen (Co-Author); Janne Pietarinen (Co-Author); Kirsi Pyhältö (Co-Author)

Vocational students' future identities as resources for participation in classroom conversations (Single Paper)

Johanne Fredrikke Barth Telle (Presenting Author); Kenneth Silseth (Co-Author); Ingvill Rasmussen (Co-Author)

Examining the Use of Hybrid Discourse among Preservice Teachers and Educators in Science Courses (Single Paper)

Hadeel Edrees Dabbah (Presenting Author); Orit Ben Zvi Assaraf (Co-Author)

# Session R 24 13:15–14:45 Location: HS 02.11

### Digital Tools and Competence in Education

#### Chair

Kateřina Machovcová

Testing the effect of a brief video-based intervention on algorithm awareness and knowledge (Single Paper)

Eva Thomm (Presenting Author); Leyla Dogruel (Co-Author); Johannes Bauer (Co-Author); Sven Jöckel (Co-Author)

Students' perceptions of digital tool use in the classroom (Single Paper)

Begüm Arvaneh (Presenting Author); Sabrina Reith (Co-Author); Karsten Stegmann (Co-Author); Maria Bannert (Co-Author)

Evaluating video-based teacher trainings for digital competence using an interdisciplinary framework (Single Paper)

Benjamin Heinitz (Presenting Author); Jennifer Maria Janeczko (Presenting Author); Habiba Mohtadi (Co-Author); Sylvia Gabel (Co-Author); Johanna Lea Korell (Co-Author); Andreas Gegenfurtner (Co-Author); Nicola Meschede (Co-Author); Manfred Holodynski (Co-Author)

Social services and healthcare personnel's digital competence profiles: Cross-sectional study (Single Paper)

Minna Ylönen (Presenting Author); Panu Forsman (Co-Author); Erika Jarva (Co-Author); Teuvo Antikainen (Co-Author); Petri Kulmala (Co-Author); Kristina Mikkonen (Co-Author); Tommi Kärkkäinen (Co-Author); Raija Hämäläinen (Co-Author)

Session R 25 13:15-14:45 Location: HS 03.01

# Effects of Technological Tools in Instructional Design

#### Chair

Marjon Fokkens-Bruinsma

Less is More? Examining the Role of Simplicity vs. Realism in Virtual Learning Environments (Single Paper)

Charlotte Larmuseau (Presenting Author); Laetitia De Leersnijder (Co-Author); Tammy Schellens (Co-Author); Carl Boel (Co-Author); Tijs Rotsaert (Co-Author); Jelle Demanet (Co-Author)

Leveraging Technology and Collaboration in Crisis Learning Spaces: Insights from Temporary Solutions (Single Paper)

Ina Blau (Presenting Author); Orit Avdiel (Co-Author)

Interactive Graphic Organizer in Online Reading: Effect on Text Navigation and Reading (Single Paper)

Sanha Lee (Presenting Author); Tino Endres (Co-Author); Sascha Schneider (University of Zurich)

Effects of Generative AI on the Quality of Instructional Design Outcomes and Prompting Strategies (Single Paper)

Kristina Krushinskaia (Presenting Author); Jan Elen (Co-Author); Annelies Raes (Co-Author)

Session R 26 13:15-14:45 Location: HS 15.13

### Interleaved Practice in Meaningful Learning

Chair Marina Klimovich; Tobias

Richter

Discussant Veit Kubik

Organiser Lea Nemeth; Parvaneh Babari;

Steven Pan

Interleaved Practice in Meaningful Learning (Symposium)

Interleaving vs. Blocking: Impact on Cognitive Demands in Learning Rational Number Arithmetic (Single Paper)

Parvaneh Babari (Presenting Author); Lennart Schalk (Co-Author)

Interleaving Subtraction Strategies Goes Solo: No Benefit From Initial Blocking or Self-Explanation (Single Paper)

Lea Nemeth (Presenting Author); Nike Scheitz (Co-Author); Nicole Hollmann (Co-Author); Johannes Osterberg (Co-Author); Frank Lipowsky (Co-Author); Rita Borromeo Ferri (Co-Author)

Using Interleaved Practice to Foster Spelling Acquisition (Single Paper)

Marina Klimovich (Presenting Author); Tobias Richter (Co-Author)

The Reflective Comparison Effect: Enhancing the Efficacy of Blocking and Interleaving (Single Paper)

Steven Pan (Presenting Author); Ganeash Selvarajan (Co-Author)

Session S 01 15:00-16:30 Location: Festsaal

### Motivation in teaching and learning

Kerstin Helker

Meeting Unspoken Needs: Teachers' Awareness of Students' Psychological Needs (Single Paper)

Athanasios Mouratidis (Presenting Author); Panagiotis Varsamis (Co-Author); Aikaterini Michou (University of Ioannina)

Emergence of Team Motivational Beliefs from Individual Students' Goal Orientation (Single Paper)

Alessio Giarrizzo (Presenting Author); Nathalie DELOBBE (Co-Author)

TEACHERS' MOTIVATIONS TO JOIN AND STAY IN A PROFESSIONAL LEARNING PROGRAM FOR ACTION RESEARCH (Single Paper)

Çiğdem Haser (Presenting Author); Emel Uysal Ünsal (Presenting Author); Fulya Koyuncu (Presenting Author)

How goals guide preservice teachers' attention: Insights from an eye-tracking study (Single Paper)

Ricardo Böheim (Presenting Author); Martin Daumiller (Presenting Author); Alijagic Aldin (Co-Author); Andreas Gegenfurtner (Co-Author); Doris Lewalter (Co-Author); Markus Dresel (Co-Author); Tina Seidel (Co-Author)

Session S 02 15:00–16:30 Location: HS 02.21

# Navigating learning and teaching in evolving contexts

#### Speaker

Maryam Alqassab

Novice university teachers' tensions and associated learning experiences: A longitudinal diary study (Single Paper)

Marije Eradus (Presenting Author); Loes de Jong (Co-Author); Natalie Pareja Roblin (Co-Author); Monique Volman (Co-Author)

Adaptability Profiles and Learning Differences of First-Year Bachelor Students in a CBL Course (Single Paper)

Weiwei Li (Presenting Author); Karolina Doulougeri (Co-Author); Gunter Bombaerts (Co-Author); Jan Vermunt (Co-Author)

AI Literacy in the Classroom: Validating the SAILS-T (Single Paper) Janne Paula Mesenhöller (Presenting Author); Katrin Böhme (Co-Author)

Session S 03 15:00-16:30 Location: HS 44.11

# Digital Technology and AI Uses in Education

#### Chair

Chris Mayer

The impact of teacher's body language on student's position taking (Single Paper) Sarah Delling (Presenting Author)

Qualitatively different ways of experiencing AI-assisted writing in UK higher education (Single Paper)

Sophia Mavridi (Presenting Author)

Navigating Educational Chatbots: Insights on Technology, Theories, and Evaluation – A Review (Single Paper)

Tim Debets (Presenting Author); Seyyed Kazem Banihashem (Co-Author); Desirée Joosten-ten Brinke (Co-Author); Tanja Vos (Co-Author); Gideon Maillette de Buy Wenniger (Co-Author); Gino Camp (Co-Author)

Decoding university teachers' decision-making in technology integration into teaching (Single Paper)

Ha Nguyen (Presenting Author); Angeliki Mali (Co-Author); Jolien Mouw (Co-Author); Hanke Korpershoek (Co-Author); Jan-Willem Strijbos (Co-Author)

Session S 04 15:00–16:30 Location: HS 01.15

### Supporting motivation and self-regulated learning

#### Chair

Kateřina Machovcová

Supporting Historically Underserved Students by Investigating SRL, Motivation, and Test Anxiety (Single Paper)

Sierra Outerbridge (Presenting Author); Michelle Taub (Co-Author)

Predicting and enhancing students' knowledge on SRL with digital media (Single Paper)

Sabrina Reith (Presenting Author); Begüm Arvaneh (Co-Author); Karsten Stegmann (Co-Author); Maria Bannert (Co-Author)

Why Feedback on Self-Assessment Accuracy May Backfire: An Affective Perspective (Single Paper)

Florence Lucas (Presenting Author); Eva Janssen (Co-Author); Tamara Van Gog (Co-Author)

Teaching to the Test: Unraveling the Consequences for Student Motivation (Single Paper)

Joy Muth (Presenting Author); Marko Lüftenegger (Co-Author)

Session S 05 15:00–16:30 Location: HS 02.01

### Motivational Factors in Students at Higher Educational Levels

#### Chair

Leonie Dargiewicz

Achievement Goal Development During Researchers' Doctoral and Postdoctoral Phase (Single Paper)

Johanna Ott (Presenting Author); Markus Dresel (Co-Author); Oliver Dickhaeuser (Co-Author); Stefan Janke (Co-Author); Martin Daumiller (Co-Author); Ronja Steinhauser (University of Mannheim)

Motivation and work engagement of early – career teachers (Single Paper) Iris Marušić (Presenting Author); Josip Šabić (Co-Author); Tea Pavin Ivanec (Co-Author)

How Supervisors Shape PhD Students' Achievement Goals and Emotions: A Three-Wave Longitudinal Study.  $(Single\ Paper)$ 

Ronja Steinhauser (Presenting Author); Oliver Dickhaeuser (Co-Author); Martin Daumiller (Co-Author); Johanna Ott (Co-Author); Markus Dresel (Co-Author); Stefan Janke (Co-Author)

Profiles of College Students' Motivational Strategy Use, Academic Success, and Wellbeing (Single Paper)

Fanyi Zeng (Presenting Author); Luise von Keyserlingk (Co-Author); Jacque Eccles (Co-Author); Jutta Heckhausen (Co-Author)

Session S 06 15:00–16:30 Location: HS 15.11

# Perspectives and Challenges in Teacher Education

#### Chair

Hai Min Dai

Exploring Teacher Beliefs on Proof and Teaching Proof: A Scale Development Study (Single Paper)

Melek Pesen (Presenting Author); Emine Erktin (Co-Author)

Differences in pre-service teachers' self-efficacy beliefs and willingness for inclusive education (Single Paper)

Gamze Görel (Presenting Author); Katja Franzen (Co-Author); Frank Hellmich (Co-Author)

The Shortage of Teachers in Estonia: Causes and Suggestions for Additional Measures (Single Paper)

Liina Lepp (Co-Author); Katrin Saks (Co-Author); Margus Pedaste (Co-Author); Katrin Poom-Valickis (Co-Author); Äli Leijen (University of Tartu)

Investigating additional factors for pre-service teachers' source preference and source choice (Single Paper)

Andreas Lederer (Presenting Author); Eva Thomm (Co-Author); Johannes Bauer (Co-Author); Alexander Groeschner (Friedrich Schiller University Jena)

Session S 07 15:00–16:30 Location: HS 02.11

### Classroom relationships and management

Chair

Susanne Seifert

Engagement and Burnout in the Classroom – Crossover Effects from Teachers to Students (Single Paper)

Linda Österholm (Presenting Author); Anna Widlund (Co-Author); Johan Korhonen (Co-Author)

Primary school students' perceived teacher support—longitudinal multilevel analysis (Single Paper)

Pihla Rautanen (Presenting Author); Roosa Yli-Pietilä (Co-Author); Tiina Soini-Ikonen (Co-Author)

Students' employment in relation to their career engagement and study success (Single Paper)

Tarja Tuononen (Presenting Author); Heidi Hyytinen (Co-Author); Anne Haarala-Muhonen (Co-Author)

An updated meta-analysis of the effects of classroom management interventions on student outcomes (Single Paper)

Hanke Korpershoek (Presenting Author); Hester de Boer (Co-Author); Jolien Mouw (Co-Author)

Session S 08 15:00–16:30 Location: HS 01.22

# **Argumentation and Critical Thinking**

Chair

Thérèse Bouffard

The competence of data-based argumentation – a hierarchical model and empirical findings (Single Paper)

Jens Oliver Krummenauer (Presenting Author); Sebastian Kuntze (Co-Author)

Enhancing scientific argumentation through advocacy errors: Effects of support and prior knowledge (Single Paper)

Eric Klopp (Presenting Author); Robin Stark (Co-Author)

Making talk work: Using a dialogic approach to develop intercultural competence with students. (Single Paper)

Johanna Einfalt (Presenting Author)

Position and patterns of argumentation when learning about an educational misconception in L2  $({\rm Single\ Paper})$ 

Juliana do Amaral (Presenting Author)

Session S 09 15:00–16:30 Location: SZ 15.21

# Teacher Self-Regulated Learning and Professional Development

Chair

Burcu Arslan

Teachers' Reflections on Flexible Mathematical Thinking in Online In-service Training (Single Paper)

Pauliina Salonen (Presenting Author); Markus Hähkiöniemi (Co-Author); Minna Hannula-Sormunen (University of Turku)

From professional development to practice: An empirically-based theory of initial pedagogic change (Single Paper)

Gabrielle Arenge (Presenting Author); Riikka Hofmann (Co-Author)

Teachers' self-regulated learning: a systematic review using a meta-aggregative approach (Single Paper)

Alex de Pape (Presenting Author); Eleni Kougentaki (Co-Author); Margaux Pyls (Co-Author); Free De Backer (Co-Author); Valérie Thomas (Co-Author); Koen Lombaerts (Co-Author)

From classrooms to communities: Knowledge flow in technology-enhanced pedagogical innovations (Single Paper)

Charlotte Baez (Presenting Author); Patricia Bachmann (Co-Author); Marcel Jent (Co-Author)

Session S 10 15:00–16:30 Location: HS 05.12

### Impact of Professional Development Programs

Chair

Leandra Ve Saskia Romey

Enhancing Classroom Talk: A Systematic Review of Professional Development Programs (Single Paper)

Aaron Wilson (Presenting Author); Ian A.G. Wilkinson (Co-Author); Yaping Yang (Co-Author)

Online teacher professional development: Highly beneficial, but not for everyone? (Single Paper)

Corinne Wyss (Presenting Author); Samuel Krattenmacher (Presenting Author); Thomas Rey (Co-Author); Anna Roos (Co-Author); Kerstin Baeuerlein (Co-Author); Eva Weingartner (Co-Author); Nina Hüsler (Co-Author); Alexandra Roggensinger (Co-Author)

Session S 11 15:00–16:30 Location: HS 15.13

### Fostering Engagement in Diverse Educational Settings

Chair

Ka Lok Cheng

The Role of Job Crafting in Fulfilling Teachers' Basic Psychological Needs (Single Paper)

Toyama Hiroyuki (Co-Author); Katariina Salmela-Aro (Co-Author); Olli-Pekka Heinimäki (University of Turku)

Engaged and Achieved in Massive Open Online Courses: A Value-Oriented Approach (Single Paper)

Servet Altan (Presenting Author); Ezgi Toplu-Demirtaş (Co-Author); İbrahim Burak Ölmez (Co-Author); Paker Doğu Özdemir (Co-Author); Carlton Fong (Co-Author); Martin Daumiller (Co-Author)

Student Diversity, Communal Self-Views, and Benefits of Choice: Supporting Autonomy and Relatedness (Single Paper)

Laura Froehlich (Presenting Author); Mai Grundmann (Co-Author); Lena Schützler (Co-Author); Oliver Christ (Co-Author)

Ripple Effects of Mentoring: Leveraging Research Mentoring Dyads in Higher Education (Single Paper)

Kinga Kaplar-Kodacsy (Presenting Author); Helga Dorner (Co-Author); Roger Fillingim (Co-Author)

# Session S 12 15:00–16:30 Location: HS 46.01

### Cognitive skills, positive beliefs and creativity in learning

#### Chair

Verena Dresen

The predictive power of cognitive skills on first-semester academic success (Single Paper)

Adam Kocsis (Presenting Author); Gyöngyvér Molnár (Co-Author)

How positive beliefs foster pupils' adaptive reactions to errors: An experimental field-study (Single Paper)

Jana Spear (Presenting Author); Donna Bryce (Co-Author); Carolin Burmeister (Co-Author); Robert Grassinger (Co-Author); Markus Dresel (University of Augsburg)

Exploring the relationships between mind wandering, mindfulness playfulness and creativity (Single Paper)

David Preiss (Presenting Author); Valeska Grau Cardenas (Co-Author); David Torres-Irribarra (Co-Author); Carolina Araya (Co-Author); Benjamín Carmona (Co-Author); Catalina Reszczynski (Co-Author)

Session S 13 15:00–16:30 Location: SR 03.K1

### Teaching Strategies and Scaffolding with Young Children

### Speaker

Jakob Thomas Fischer

Online Development of Math Abilities in Kindergarten (Single Paper)

Renáta Kiss (Presenting Author); Szilvia Zanóczné Markovics (Co-Author); Dora Mokri (Co-Author); Réka Ökördi (Co-Author); Gyöngyvér Molnár (Co-Author)

Fostering dialogic pedagogy with young students in mathematics through exploratory talk (Single Paper)

Carol Murphy (Presenting Author); Damon Thomas (Presenting Author); Tracey Muir (Co-Author)

Teachers' Linguistic Strategies in Summer Early Childhood Settings (Single Paper) Eleni Zgourou (Presenting Author); Samantha Kaufman (Co-Author); Wilson Rodrigues (Co-Author); Haley Karabinchak (Co-Author)

Improving Preschool Teachers' Scaffolding Through Block Play-Based Professional Development (Single Paper)

Lukas Lazzara (Presenting Author); Anke Maria Weber (Co-Author); Miriam Leuchter (Co-Author)

Session S 14 15:00–16:30 Location: HS 15.04

# Student Learning and Regulatory Strategies

#### Chair

Anoop Saxena

Evolving Interactions between Self- and Shared Regulation in Challenge-Based Learning (Single Paper)

Karolina Doulougeri (Presenting Author); Gunter Bombaerts (Co-Author); Jan Vermunt (Co-Author); Weiwei Li (Eindhoven School of Education)

Automatic assessment tool for detecting regulatory strategies in qualitative data (Single Paper)

Matúš Brziak (Presenting Author); Marek Urban (Presenting Author); Kamila Urban (Co-Author); Veronika Hein (Co-Author); Peter Seban (Co-Author)

Individual Differences and Short-Term Changes in Monitoring-Based Restudy (Single Paper)

Katharina Zimmermann (Presenting Author); Eileen Rueegg (Co-Author); Mariette van Loon (Co-Author)

Beyond Deliberation and Intention – A Habitual Perspective on Learning Strategy Use (Single Paper)

Ann-Kathrin Krause (Presenting Author); Jasmin Breitwieser (Co-Author); Garvin Brod (Co-Author)

Session S 15 15:00–16:30 Location: HS 15.02

# Supporting migrant and refugee students through inclusive education

#### Chair

Valerie Fredericks

Education, Language and Belonging: The Integration of Refugee Children in Croatian Schools (Single Paper)

Antonija Vrdoljak (Presenting Author); Margareta Jelić (Co-Author); Dinka Čorkalo Biruški (Co-Author); Nikolina Stanković (Co-Author); Rea Modesti Beribak (Co-Author); Tihana Poslon (Co-Author); Rachel Fasel (Co-Author); Fabrizio Butera (Co-Author)

Ethnic-Racial Self-Schemas and Identity: Links to Well-Being in Portuguese Middle and High Schoolers (Single Paper)

Mafalda Campos (Presenting Author); Francisco Peixoto (Co-Author)

Generational Differences in Stereotype Threat: Effects on Migrant Student Performance (Single Paper)

Haliemah Mocevic (Presenting Author); Burkhard Gniewosz (Co-Author)

Intercultural competence for teaching migrant students from the perspective of teachers and leaders (Single Paper)

Maiki Vanahans (Presenting Author); Inge Timoštšuk (Co-Author); Krista Uibu (Co-Author)

# Session S 16 15:00–16:30 Location: HS 11.01

### Teacher Education and Professional Development with Simulations

Chair

Katharina Bach

Simulation-based Practice Designs: Preparing Pre-service Teachers for Their Future Profession (Single Paper)

Toril Aagaard (Presenting Author); Agnete Bueie (Presenting Author); Lynn Dittrich (Co-Author); Charlotte Beal (University of South-Eastern Norway)

Exploring teachers' TPACK, pedagogical beliefs, and instructional reading material use (Single Paper)

Nurul Fitriyah Almunawaroh (Presenting Author); János Steklács (Co-Author)

How 'What-If' Discussions within Virtual Patients Enhance Clinical Reasoning and Knowledge Transfer (Single Paper)

Zhien Li (Presenting Author); Maryam Asoodar (Co-Author); Desirée Joosten-ten Brinke (Co-Author); Tom Keulers (Co-Author); Xian Liu (Co-Author); Diana Dolmans (Co-Author)

Experimental Evidence about Modularizing Content in Teacher Education (Single Paper)

Julie Cohen (Presenting Author)

Session S 17 15:00–16:30 Location: HS 02.23

### Support for Students and Teachers at Multiple Levels

Chair

Paula Pedić

Supporting faculty in 'internationalization at home'. Insights from an integrative literature review (Single Paper)

Helga Dorner (Presenting Author); Klára Antesberger (Co-Author); Zsófia Hangyál (Co-Author); Emese Schiller (Co-Author)

Supporting team learning – the role of academic development (Single Paper) Franziska Zellweger (Presenting Author); Mirjam Kocher (Presenting Author)

Effectiveness of teacher training when implementing an ITS in real classrooms – An RCT in 7th grade (Single Paper)

Florian Berens (Presenting Author); Katharina Wendebourg (Co-Author); Mareike Kholin (Co-Author); Julia Schmidt-Peterson (Co-Author); Leona Colling (Co-Author); Manuel Hopp (Co-Author); Tanja Heck (Co-Author); Stephen Bodnar (Co-Author); Walid El Hefny (Co-Author); Florian Nuxoll (Co-Author); Christoph Deeg (Co-Author); Katja Krey (Co-Author); Detmar Meurers (Co-Author); Josef Schrader (Co-Author); Hannes Schröter (Co-Author); Benjamin Nagengast (Co-Author); Ulrich Trautwein (Co-Author)

Teachers' support for children becoming pupils (Single Paper)

Reidun Hoff-Jenssen (Presenting Author)

Session S 18 15:00–16:30 Location: HS 11.02

# Agency, Leadership, and Wellbeing in Educational Contexts

Speaker

Leen Catrysse

Student carers in formal education: a literature review (Single Paper)

Dangeni Dangeni (Presenting Author)

Meaningful work, leadership and stress - a study of Finnish principals (Single Paper) Raisa Carpelan (Presenting Author); Lauri Heikonen (Presenting Author); Risto Hotulainen (Co-Author)

The Effects of Principal Values on Teachers' Autonomy Satisfaction and Emotional Exhaustion (Single Paper)

Ying CHEN (Presenting Author); Hui Wang (Co-Author); Xiulin Zheng (Co-Author)

Professional Agency and Work Engagement: A Longitudinal Examination (Single Paper)

Päivi Hökkä (Presenting Author); Tuomo Virtanen (Co-Author); Susanna Paloniemi (Co-Author); Katja Vähäsantanen (Co-Author)

Session S 19 15:00–16:30 Location: HS 11.03

### Innovative Practices and Their Impact on Schooling

Chair Xian Liu A live role-play simulation for school as an organisation improvement (Single Paper) Dace Namsone (Presenting Author); Kārlis Greitāns (Co-Author); Uģis Strauss (Co-Author); Ildze Čakāne (Co-Author)

**Experimental Translanguaging Research: A systematic review** (Single Paper) Sander Hoeven (Presenting Author); Tom Smits (Presenting Author)

A Catholic school, effect in Northern Ireland? Impacts on attainment, wellbeing and citizenship (Single Paper)

Daniel Muijs (Presenting Author)

Impact of a computational thinking programme on complex problem solving in lower secondary school (Single Paper)

Leitgeb Thomas (Presenting Author); Wolfram Rollett (Presenting Author); Katja Scharenberg (Co-Author)

Session S 20 15:00–16:30 Location: HS 05.01 Experimentierhörsaal

#### Educating for a sustainable future: Climate literacy, leadership and global citizenship

Chair

Michael Rochnia

Review on The Integration of Global Citizenship Education in Classrooms Worldwide (Single Paper)

Rizvika Rahmita Salim (Presenting Author); Gyöngyvér Molnár (Co-Author)

Comparing climate change and sustainability leadership in four UK secondary schools (Single Paper)

Paul Howard-Jones (Presenting Author); Loz Hennessy (Co-Author)

The role of mindsets in climate action: a study among European young people (Single Paper)

Inkeri Rissanen (Presenting Author); Elina Kuusisto (Co-Author); Essi Aarnio-Linnanvuori (Co-Author)

# Session S 21 15:00–16:30 Location: HS 15.14

### Supporting Diverse Learners in Early to Secondary Education

# Chair

Engin Ader

Eye-mouth preference during Speech Perception in Children with Autims Spectrum Disorders (Single Paper)

Inmaculada Fajardo (Presenting Author); Nadina Gómez-Merino (Co-Author); Patricia Pérez-Fuster (Co-Author); Ávila Vicenta (Co-Author); Noemi Skrobiszewska (Co-Author); Antonio Ferrer (Co-Author)

PISA 2022 mathematics performance of students with immigrant background and support needs in Finland (Single Paper)

Faruk Nazeri (Presenting Author); Ninja Hienonen (Co-Author); Mari-Pauliina Vainikainen (Co-Author)

Time To First Fixation and working memory as indicators of global overview when subitizing (Single Paper)

Mona Holmqvist (Presenting Author); Damon Tutunjian (Co-Author); Catarina Wästerlid (Co-Author)

Developing eye tracking task to explore visual processing and digital engagement in the early years  $(Single\ Paper)$ 

Sonia White (Presenting Author); Nicole Hayes (Co-Author)

Session S 22 15:00–16:30 Location: HS 25.11

### **School Practices and Outcomes**

#### Chair

Moritz Sahlender

Exploring Schadenfreude in School: A Multidimensional Construct and its Stability over Time (Single Paper)

Maximilian Hofleitner (Presenting Author); Flora Fassl (Co-Author); Marko Lüftenegger (Co-Author)

Co-Construction of a homogeneous problem perception and its effect on the immediacy of strategy use  $(Single\ Paper)$ 

Laura Spang (Presenting Author); Martin Greisel (Co-Author); Ingo Kollar (Co-Author)

Fostering Entrepreneurial KSA: Developing Educational Escape Games in Secondary Education (Single Paper)

Sultan Goksen-Olgun (Presenting Author); Wim Groot (Co-Author); Ingrid Wakkee (Co-Author); Richard Martina (Co-Author)

Coffee Break 16:30–17:00

Coffee Break

Session T 01 17:00–18:30 Location: SR 15.42

### Instruction in higher education and teacher education

#### Chair

Valerie Fredericks

Did a language-focused professional development intervention impact teacher talk in group play? (Poster Presentation)

Elise Øksendal (Presenting Author); Ratib Lekhal (Co-Author); Vibeke Grøver (Co-Author); Tone Ovati (Co-Author); Veslemøy Rydland (Co-Author)

Teacher Educators' Perspectives on Pre-service Teachers' Challenges in English Medium Instruction (Poster Presentation)

Charles Selorm Dzormeku (Presenting Author); Koen Veermans (Co-Author); Alex Adobaw-Bansah (University of Cape Coast)

Career-Choice Motivations of Pre-Service Teachers Before and During the COVID-19 Pandemic (Poster Presentation)

Anna M. Eder-Jahn (Presenting Author); Burkhard Gniewosz (Co-Author); Michaela Katstaller (Co-Author)

Development of Chinese Teachers' Culture Teaching Scale: Exploring Potentials of Culture Teaching (Poster Presentation)

Wai Ming Cheung (Presenting Author); Serene Chan (Presenting Author); Lanfang Sun (Co-Author); Manson C. M. Wong (Co-Author)

Practical Cognitive Principles for Instruction in Higher Education Classrooms: A Review of Reviews (Poster Presentation)

Guus Lambert (Presenting Author); Hanneke Theelen (Co-Author); Gino Camp (Co-Author)

Worth a trade? How university teachers approach higher education research and development (Poster Presentation)

Janna Meyer-Beining (Presenting Author); Linda Bradley (Co-Author)

Session T 02 17:00–18:30 Location: SR 15.44

### Individual differences and contextual influences in learning and academic development

#### Chair

Caroline Mansfield

Children with working tempo difficulties in inclusive classroom (Poster Presentation) Zuzana Bílková (Presenting Author); Zuzana Štefánková (Co-Author)

The efficacy and utilization of online quizzes by instructors in higher education (Poster Presentation)

Liesbeth Coppens (Presenting Author); Katrien Hermans (Co-Author); Liesbet Saenen (Co-Author); Karin Coninx (Co-Author); Katrien Struyven (Co-Author)

Beyond school: the lingering effects of untreated dyscalculia in university students (Poster Presentation)

Laura Staller (Presenting Author); Korbinian Moeller (Co-Author); Elisabeth Weiss (Co-Author); Verena Dresen (Co-Author)

Complex Dynamic Systems approach to changing SES and Academic Achievement (Poster Presentation)

Stephen Whitney (Presenting Author)

Atypical and typical development of arithmetic skills (Poster Presentation)

Matilda Hamara (Presenting Author); Minna Torppa (Co-Author); Mikko Aro (Co-Author); Tuire Koponen (Co-Author)

Session T 03 17:00–18:30 Location: SR 15.48

### Students' Motivation, Emotion, and Self-Regulation

#### Chair

Larike Bronkhorst

Pathways to adolescents' academic self-regulation and achievement based on Identity-Based Motivation (Poster Presentation)

Evropi Efthymiadou (Presenting Author); Eleftheria Gonida (Co-Author)

The interplay of students' motivation, emotions and shared regulation in collaborative learning (Poster Presentation)

Jasmiina Suoraniemi (Presenting Author); Hanna Jarvenoja (Co-Author); Tiina Törmänen (Co-Author)

Enhancing Students' Motivation and Regulated Learning with Classroom Interaction Practices (Poster Presentation)

Tiina Törmänen (Presenting Author); Marjo Turunen (Co-Author); Emma Lehtoaho (Co-Author); Jasmiina Suoraniemi (Co-Author); Hanna Jarvenoja (Co-Author)

The use of motivation regulation strategies and their link to situational motivation (Poster Presentation)

Marjo Turunen (Presenting Author); Tiina Törmänen (Co-Author); Hanna Jarvenoja (Co-Author)

Relationships between beliefs about boredom and difficulty and motivational regulation strategies (Poster Presentation)

Li Tang (Presenting Author); Mengsi Liu (Co-Author)

Perceived STEM Career Benefits and Challenges Among Racially Marginalized High School Girls and Boys (Poster Presentation)

Xiao-Yin Chen (Presenting Author); Yichi Zhang (Co-Author); Harlee Robinson (Co-Author); Emily Rosenzweig (Co-Author)

Session T 04 17:00–18:30 Location: SR 15.43

### Understanding and supporting early learning through emotion, cognition and assessment

#### Speaker

Seyed Mohammad Momeni

Innovative digital support for reading comprehension: Evaluation of a multi-part training format (Poster Presentation)

Elisabeth Herunter (Presenting Author); Susanne Seifert (Co-Author)

The Power of Emotional Self-Management: The Role of Classroom Climate and Cardiac Vagal Tone (Poster Presentation)

Benedetta Zagni (Presenting Author); Sara Scrimin (Co-Author); Mark Van Ryzin (Co-Author); Dario Ianes (Co-Author)

Measuring math achievement in first grade: Test equivalence and difficulty-generating item features (Poster Presentation)

Nils Goldboom (Presenting Author); Jasmin Walter (Co-Author); Joerg-Tobias Kuhn (Co-Author); Daniel Sommerhoff (Co-Author); Natalie Foerster (Co-Author)

Assessing Primary Students' Emotions: The Drawing Set for the Achievement Emotions Adjective List (Poster Presentation)

Daniela Raccanello (Presenting Author); Roberto Burro (Co-Author)

Japanese CHEXI for screening children with executive dysfunction at elementary school entry (Poster Presentation)

Kyoko Imai-Matsumura (Presenting Author)

Process quality in preschool and school: Theoretical conceptualization (Poster Presentation)

Daniel Then (Presenting Author); Julia Warmdt (Presenting Author); Sanna Pohlmann-Rother (Co-Author); Veronika Dumbacher (Co-Author)

Session T 05 17:00–18:30 Location: SR 15.45

### School Culture, Instructional Design and Evaluation

### Speaker

Debora Marchak

The Role of Models for Instructional Design in CPD for Teachers Working in Inclusive Classrooms (Poster Presentation)

Juliane Leuders (Presenting Author)

Smoothing the path toward the adoption of monitoring and evaluation tools in partnerships (Poster Presentation)

Milena Sarmiento-Márquez (Presenting Author); Gerti Pishtari (Co-Author)

"The Dual Impact of Teaching Materials: Evolving Roles in Instruction and Expert Teacher Growth" (Poster Presentation)

Lola Garay Abad (Presenting Author); John Hattie (Co-Author)

Identifying School Culture Profiles and Their Relationship with Teachers' Work-Related Experiences (Poster Presentation)

Eve Eisenschmidt (Presenting Author); Piret Oppi (Co-Author); Daniel Reinaru (Co-Author)

Professional development of teachers for inclusion of students with externalizing behavior (Poster Presentation)

Hannah Odink (Presenting Author); Elisa Kupers (Co-Author); Anke de Boer (Co-Author); Matthijs Warrens (Co-Author); Marjon Fokkens-Bruinsma (Co-Author)

Validating a Generic Model of Research Designs in Subject-Matter Didactics by Topic Modelling (Poster Presentation)

Ulrich Riegel (Presenting Author); Jens Röschlein (Co-Author); Martin Rothgangel (Co-Author); Alexander Christ (German Institute for International Educational Research (DIPF))

Session T 06 17:00–18:30 Location: HS 46.01

### Unpacking the acquisition and development of arithmetic strategies

#### Chair

Nadir Díaz Simón

#### Discussant

Elien Bellon

### Organiser

Marian Hickendorff; Marie Krenger; Stijn Van Der Auwera Unpacking the acquisition and development of arithmetic strategies (Symposium)

Children's arithmetic strategy use and strategy change from grade 3 to grade 4 (Single Paper)

Marian Hickendorff (Presenting Author); Henning Sievert (Co-Author); Ann-Katrin van den Ham (Co-Author); Aiso Heinze (Co-Author)

The Influence of Individual Differences on Children's Strategy Adaptivity: A Study in Arithmetic (Single Paper)

Stijn Van Der Auwera (Presenting Author); Patrick Lemaire (Co-Author); Bert De Smedt (Co-Author)

Cross-national study on arithmetic development. Comparing the impact of curricular approaches  $(\mathrm{Single\ Paper})$ 

Nadir Díaz Simón (Presenting Author); Daniela Escobar Magariño (Co-Author); Daniel Ansari (Co-Author)

Finger counting strategies description in 4- to 6-year-old children (Single Paper) Marie Krenger (Presenting Author); Catherine Thevenot (Co-Author)

Session T 07 17:00–18:30 Location: HS 15.04

Powerful knowledge in history and geography education

Chair

Geerte Savenije Discussant Martin Nitsche Organiser

Wouter Smets

Powerful knowledge in history and geography education (Symposium)

Influence of curriculum contexts in fostering higher order thinking to achieve powerful knowledge (Single Paper)

Uwe Krause (Presenting Author)

Towards sustainable futures: Knowledge, power, and future in Finnish curricula documents (Single Paper)

Mikko Puustinen (Presenting Author); Amna Khawaja (Presenting Author)

Powerful history? A comparative analysis of lower secondary curricula (Single Paper)

Mikko Puustinen (Presenting Author); Amna Khawaja (Co-Author); Arthur Chapman (Co-Author); Kenneth Nordgren (Co-Author)

A Structural and Functional Differentiation of Knowledge for the History Curriculum (Single Paper)

Wouter Smets (Presenting Author); Geerte Savenije (Presenting Author)

Session T 08 17:00–18:30 Location: HS 11.01

Writing: a learning activity to construct knowledge and/or to improve writing profiency? Part 2

Chair

Gert Rijlaarsdam

Discussant
David Galbraith

Enhancing Literacy & Knowledge through Integrated Writing and Process Instruction (Single Paper)

Lieke Holdinga (Presenting Author); Gert Rijlaarsdam (Co-Author); J.P. van Drie (Co-Author)

The Teaching of Learning to Write and Writing to Learn in compulsory schooling (Single Paper)

Erika Sturk (Presenting Author)

Appraisal as a tool for thinking and language learning in the middle-school writing classroom (Single Paper)

Eva Lindgren (Presenting Author); Erika Sturk (Co-Author); Per Boström (Co-Author); Carina Hermansson (Co-Author); Peter Ström (Co-Author)

Writing: a learning activity to construct knowledge and/or to improve writing profiency? Part  $2 \, (\mathrm{Symposium})$ 

Writing in History with ChatGPT: Impact on text quality and epistemic experiences (Single Paper)

J.P. van Drie (Presenting Author); Monika Bagociute (Co-Author); Maurice Schols (Co-Author)

Session T 09 17:00–18:30 Location: HS 03.01

### Multiple Document Literacy with Generative AI: New Research Directions

Chair

Christian Tarchi

Discussant

Jean-François Rouet

Organiser

Ladislao Salmerón; Sarit Barzi-

Multiple Document Literacy with Generative AI: New Research Directions (Symposium)

Integrating Multiple Texts With Generative AI: Effects on Writing and Comprehension (Single Paper)

Sarit Barzilai (Presenting Author); Liron Primor Greenfield (Co-Author)

The Use of ChatGPT in Source-Based Writing Tasks (Single Paper) Christian Tarchi (Presenting Author); Lidia Casado Ledesma (Co-Author)

Identifying Patterns of Epistemic Behavior in an Online Inquiry Task (Single Paper) Jasmine Kim (Presenting Author); Panayiota Kendeou (Co-Author)

Students' Evaluation and Use of ChatGPT-Generated versus Human-Generated Texts (Single Paper)

Natalia Latini (Presenting Author); Ivar Bråten (Co-Author); Helge I. Strømsø (Co-Author)

Session T 10 17:00–18:30 Location: HS 02.23

# Assessing Students' Critical (Online) Thinking and Reasoning in Open and Closed Information Settings

Chair

Olga Zlatkin-Troitschanskaia

Discussant

Natalia Ronderos

Criteria-based Evaluation of Students' Use of Multiple Information in Solving a Performance Task (Single Paper)

Katharina Depré (Presenting Author); Olga Zlatkin-Troitschanskaia (Co-Author); Dominik Braunheim (Co-Author); Tim Niklas Bartnik (Co-Author); Marie-Theres Nagel (Co-Author); Richard Shavelson (Co-Author)

Information quality of online sources used by first-semester students when solving generic COR tasks (Single Paper)

Tobias Scherer (Presenting Author); Alice Laufer (Co-Author); Christian Schemer (Co-Author); Marcus Maurer (Co-Author)

Critical Online Reasoning and the Use of Online Sources by Students of Economics and Medicine (Single Paper)

Amina Touzos (Presenting Author); Olga Zlatkin-Troitschanskaia (Presenting Author); Mita Banerjee (Co-Author); Carla Schelle (Co-Author); Dominik Braunheim (Co-Author)

Assessing Students' Critical (Online) Thinking and Reasoning in Open and Closed Information Settings (Symposium)

Critical Thinking or Defending a Position. Do college students understand the difference?  $(Single\ Paper)$ 

Kai Cortina (Presenting Author); Blake Ebright-Jones (Co-Author); Jackson Schwartz (Co-Author)

Session T 11 17:00–18:30 Location: HS 11.02

### Innovations in Youth Mental Health: Cross-Cultural Digital Approaches

Chair

Valerie Fredericks

Discussant

Barbara Gasteiger-Klicpera

Organiser

Franziska Reitegger

Innovations in Youth Mental Health: Cross-Cultural Digital Approaches (Symposium)

Technical Solutions for Accessible and Engaging Digital Mental Health Programs for Youth (Single Paper)

Ioannis Patias (Presenting Author); Elitsa Peltekova (Co-Author); Dafinka Miteva (Co-Author)

Pilot Study Results: A Digital Approach to Supporting Adolescent Mental Health (Single Paper)

Katarzyna Borzucka-Sitkiewicz (Presenting Author); Marcin Gierczyk (Co-Author); Katarzyna Kowalczweska-Grabowska (Co-Author)

Stressors and Coping Resources for Youth: Cross-National Insights from Participatory Workshops (Single Paper)

Michaela Wright (Presenting Author); Franziska Reitegger (Co-Author); Barbara Gasteiger-Klicpera (Co-Author); Manja Veldin (Co-Author); Masa Vidmar (Co-Author); Katarzyna Borzucka-Sitkiewicz (Co-Author); Marcin Gierczyk (Co-Author); Katarzyna Kowalczweska-Grabowska (Co-Author)

Empowering Youth Mental Health: Project Introduction and Key Insights from Systematic Reviews (Single Paper)

Franziska Reitegger (Presenting Author); Michaela Wright (Co-Author); Barbara Gasteiger-Klicpera (Co-Author); Igor Peras (Co-Author)

Session T 12 17:00–18:30 Location: HS 02.11

Parents and children's motivation and achievement: Different aspects, pathways, and interactions.

Chair

Thérèse Bouffard

Discussant

Ruth Butler

Organiser

Eleftheria Gonida

Parents and children's motivation and achievement: Different aspects, pathways, and interactions. (Symposium)

Parent motivation and homework involvement profiles: relations with child motivation and achievement (Single Paper)

Eleftheria Gonida (Presenting Author); Konstantina Falanga (Co-Author); Angelos Markos (Co-Author)

Parent practices and student math achievement and motivation: A longitudinal exploration (Single Paper)

Francisco Peixoto (Presenting Author); Lourdes Mata (Co-Author); Mafalda Campos (Co-Author); Jelena Radišić (Co-Author); Kajsa Yang Hansen (Co-Author); Markku Niemivirta (Co-Author)

Importance of academic performance: Parent/Child divergence, student anxiety and sense of competence (Single Paper)

Thérèse Bouffard (Presenting Author); Nadia Leroy (Co-Author); Mathilde Pineault- Deault (Co-Author); Carole Vezeau (Co-Author)

Concordance/Discordance in parent and teacher achievement goals, student goals and test anxiety (Single Paper)

Nadia Leroy (Presenting Author); Pascal Pansu (Co-Author)

Session T 13 17:00–18:30 Location: HS 15.03

# AI-based Conversational Agents as Learning Partners in Computer-Supported Collaborative Learning

Chair

Armin Weinberger

Discussant

Tobias Ley

Organiser

Bernhard Ertl; Manuela Paechter; Pantelis M. Pa-

padopoulos

AI-based Conversational Agents as Learning Partners in Computer-Supported Collaborative Learning (Symposium)

The impact of a collaborative conversational agent on dialogue productivity and academic performance (Single Paper)

Pantelis M. Papadopoulos (Presenting Author); Adelson de Araujo (Co-Author); Susan McKenney (Co-Author); Ton de Jong (Co-Author)

Supporting Transactive Dialogue in Collaborative Learning Scenarios: When 'less' may be 'more' (Single Paper)

William Pfannenstiel (Co-Author); Armin Weinberger (Co-Author); Albulene Grajcevci (Saarland University)

AI avatars as trainers for oral foreign language exams (Single Paper)

Bernhard Ertl (Presenting Author); Maximilian C. Fink (Co-Author); Lars Walter (Co-Author)

(Para)social Interaction, Presence, Trust, and Satisfaction: Comparing Human Tutors and AI Tutors (Single Paper)

Manuela Paechter (Presenting Author); Daniel Macher (Co-Author); Dimitris Skliris (Co-Author); Manuel Ninaus (Co-Author)

Session T 14 17:00–18:30 Location: HS 12.01

# Navigating the transition to higher education: Diverse approaches to pre- and post-enrolment support

Chair

Pieter van Lamoen

Discussant

Franziska Zellweger

Organiser

Nicky de Vries

Navigating the transition to higher education: Diverse approaches to pre- and post-enrolment support (Symposium)

Connecting through transition: Peer relationship development in first-year higher education (Single Paper)

Marieke Meeuwisse (Presenting Author); Pieter van Lamoen (Co-Author); Annemarie Hiemstra (Co-Author); Arends Lidia (Co-Author); Sabne Severiens (Co-Author)

Transition into Distance Education: Navigating initial challenges to unlock educational potential (Single Paper)

Caroline Trautwein (Presenting Author); Stefanie Habermann (Co-Author); Michael Hast (Co-Author)

Pre-Enrolment Predictive Analytics to Support Transition into HE: Key Features and Ethical Concerns (Single Paper)

Nicky de Vries (Presenting Author); Mariette Huizinga (Presenting Author); Martijn Meeter (Co-Author)

The Role of Skill-Major Fit for Motivation, Choice and Success in a Major Beyond Other Forecasts (Single Paper)

Belinda Merkle (Presenting Author); Oliver Dickhaeuser (Co-Author)

Session T 15 17:00–18:30 Location: HS 44.11

Sensing Learning: Student Perceptions as a Lens on Teaching Quality and Student Learning

Chair

Richard Göllner **Discussant** 

Hannah Bijlsma Organiser

Annelie Thom; Thilo Kleickmann

Sensing Learning: Student Perceptions as a Lens on Teaching Quality and Student Learning (Symposium)

Associations between students' engagement and perceived teaching characteristics (Single Paper)

Miriam Weich (Presenting Author); Richard Göllner (Co-Author); Barbara E. Stalder (Co-Author)

Effects of Student Groups on Teachers' and Students' Perceptions of Teaching Quality  $(\mathrm{Single\ Paper})$ 

Alexander Jonas Jung (Presenting Author); Kou Murayama (Co-Author); Ann-Kathrin Jaekel (Co-Author); Richard Göllner (Co-Author)

Students' use of learning opportunities in class: An experience sampling study (Single Paper)

Leonie Gossner (Presenting Author); Charalambos Charalambous (Co-Author); Sebastian Röhl (Co-Author); Urs W. Grob (Co-Author); Anna-Katharina Praetorius (Co-Author)

Stability and predictive power of student ratings of teaching quality with different time frames (Single Paper)

Annelie Thom (Presenting Author); Richard Göllner (Co-Author); Thilo Kleickmann (Co-Author)

Session T 16 17:00–18:30 Location: HS 01.15

New Insights on the Specific Links Between Students' Fraction and Algebra Knowledge

Chair

Claire Forsmann

Discussant

Jake McMullen

Organiser

Michael D'Erchie

New Insights on the Specific Links Between Students' Fraction and Algebra Knowledge (Symposium)

A psychological network analysis to predict algebra performance by fraction understanding (Single Paper)

Korbinian Moeller (Presenting Author); Lisa Bardach (Co-Author); Younes Strittmatter (Co-Author); Markus Wolfgang Hermann Spitzer (Martin-Luther Universität Halle)

The Relationship Between Students' Fraction and Algebra Knowledge. A Psychometric Network Analysis (Single Paper)

Claire Forsmann (Presenting Author); Michael D'Erchie (Co-Author); Andreas Obersteiner (Co-Author); Michael Schneider (Co-Author)

Relations and Mediating Effects Between Conceptual and Procedural Knowledge of Fractions and Algebra (Single Paper)

Michael D'Erchie (Presenting Author); Claire Forsmann (Co-Author); Andreas Obersteiner (Co-Author); Michael Schneider (Co-Author)

An Interdisciplinary Approach to Untangling the Fractions-Algebra Relation (Single Paper)

Alexandria Viegut (Presenting Author); Jennifer Murray (Co-Author); Lauren Westerberg (Co-Author); Martha Alibali (Co-Author); Ana Stephens (Co-Author); Xiang Cheng (Co-Author); Valerie Berg (Co-Author); Daniel Bolt (Co-Author); Percival Matthews (Co-Author)

Closing Ceremony	18:30–19:15	Location: Aula
Closing Ceremony		
Afterparty at Helmut List Halle	21:00-NA	
Afterparty at Helmut List Halle		