AQUA-d Conference 2025
Advancing Digital Task Efficacy: International Perspectives on Technology-Enhanced Education

October 8th-9th, 2025 | Karlsruhe University of Education

Further information:

en.ph-ka.de/aqua-d-2025

The AQUA-d Conference provides a platform to discuss the quality of digital tasks and their role in technology-enhanced education. The event showcases findings from the interdisciplinary AQUA-d research group, focusing on the design of digital learning tasks. Experts from around the world will come together to explore new approaches to integrating digital technologies in teaching.

Program
Keynote talks | symposia | poster session | pre-conference workshops

Keynote speakers

**Prof. Jonathan Osborne (PhD)
(Stanford University)**

**Prof. Dr. Anique de Bruin
(Maastrich University)**

**Prof. Dr. Timo Leuders
(Universiy of Education
Freiburg)**

Conference Abstract & Call for Poster

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Conference Abstract

The integration of digital technologies in education offers new opportunities to improve the quality of teaching, learning, and assessment. However, the effective design and use of digital tasks require careful consideration of educational principles, subject-specific teaching approaches, skills of educators, and proper technological solutions. This challenge is addressed by the interdisciplinary research group AQUA-d at the Karlsruhe University of Education. Over the last years, the graduate program has conducted empirical work dedicated to this field of research. This international conference provides a platform to discuss key aspects of digital task quality and its role in technology-enhanced education.

Conference themes include:
- **Educational Foundations**: Examining how learning theories guide the development of effective digital tasks.
- **Practical Applications**: Sharing subject-specific strategies for integrating digital tasks into classrooms.
- **Professional Development**: Identifying how educators can develop the competencies needed to design and use digital tasks effectively.
- **Technology Support**: Exploring the role of digital tools and data in supporting teaching and learning.

Poster Session (on October 8th, 2025)

The Organizing Committee of the AQUA-d Conference 2025 cordially invites the submission of poster presentations. The poster session aims to provide a platform for researchers to present recent work, ongoing research, and innovative ideas relevant to the conference topics. We especially encourage contributions from all related research domains.

Submission Guidelines:
- Submission Deadline: May 15th, 2025
- Poster abstracts must not exceed 2,500 characters, including spaces.
- Abstracts should clearly outline the theory and research question, methodology, key findings (if available), and discussion.
- All submissions must be written in English.
- Each author may submit only one abstract as first author.

The Organizing Committee (Prof. Dr. Samuel Merk, Prof. Dr. Nadine Anskeit & Jun. Prof. Dr. Marc Philipp Janson) will review all submissions. Notifications of acceptance will be sent out by mid-June 2025.

Submission portal:

survey.ph-karlsruhe.de/aqua-d-2025/

University of Education
Pädagogische Hochschule
karlsruhe

Baden-Württemberg
MINISTERIUM FÜR WISSENSCHAFT, FORSCHUNG UND KUNST

EBERHARD KARLS
UNIVERSITÄT TÜBINGEN

AQUA d
Aufgabenqualität im
digital gestützten Unterricht

Invited symposia:

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(1) Formative Assessment - Noticing, Interpreting and Constructing Implications Based on Learning Progress Data
Presenters: Amelie Fuchs &/Daniel Sommerhoff (Kiel, Germany), Anouschka van Leeuwen (Utrecht, Netherlands), Erika Lunowa (Karlsruhe, Germany)
Discussant: Sarah Bez (Karlsruhe, Germany)

(2) Evidence-Informed School Practice: Challenges, Capacities, and Catalysts for Transformation
Presenters: Florian Kühlwein (Karlsruhe, Germany), Despoina Georgiou (Utrecht, Netherlands), Audrey Michal (Flint (MI), USA)
Discussant: Rainer Bromme (Münster, Germany)

(3) Learning with Realistic Visualizations-Strategies for Success
Presenters: Killyam Forge (Toulouse, France), Manuela Glaser (Tübingen, Germany), Robin Wagner (Tübingen, Germany), Patricia Engel-Hermann (Karlsruhe, Germany)

(4) Seeking Ways to Individualize and Tailor Motivation Interventions
Presenters: Hanna Gaspard (Konstanz, Germany), Liene Brandhuber (Karlsruhe, Germany), Emily Q. Rosenzweig (New York (NY), USA), Patrick N. Beymer (Cincinnati (OH), USA)
Discussant: Jacquelynne Eccles (Irvine (CA), USA)

(5) Metacognition and Desirable Difficulties: Enhancing Self-Regulated Learning and Judgment Accuracy in Digital Learning Environments
Presenters: Louise David (Maastricht, Netherlands), Martin Fifka (Karlsruhe, Germany), Noortje Janssen (Radboud, Netherlands), Theresa Walesch (Karlsruhe, Germany)
Discussant: Anique de Bruin (Maastricht, Netherlands)

(6) Digitally Supported Teaching and Learning Scenarios for Electricity Education (german)
Presenters: Thomas Schubatzky (Innsbruck, Austria), Florian Frank (Würzburg, Germany), Lena Lenz (Karlsruhe, Germany), Wolfang Lutz (Würzburg, Germany)

(7) Profiling Writing Tasks in Terms of Literary and Media Didactics (german)
Presenters: Afra Sturm (Olten, Switzerland), Johannes Wild (Regensburg, Germany), Daniela Matz (Tübingen, Germany), Maximilian Stoller (Karlsruhe, Germany)

(8) Innovating Task Design in Economic Education: Data-Driven Insights in Task Quality and Practical Applications
Presenters: Tomek Kopczewski (Warsaw, Poland), Stephan Friebel-Piechotta (Oldenburg, Germany), Jonathan Heitzler (Freiburg, Germany), Julian Polly (Karlsruhe, Germany)

(9) Digital Learning in Mathematics Education
Presenters: Caroline Marx (Karlsruhe, Germany), Daniel Sommerhoff (Kiel, Germany), Manuel Ninaus (Graz, Austria), Korbinian Moeller (Loughborough, United Kingdom)