
Prof. Dr.-Ing. Dominik May (PhD)

Professor for Engineering Education Research

Curriculum Vitae

Chair for Engineering Education Research
School of Mechanical Engineering and Safety Engineering
University of Wuppertal
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Passionate Engineering Education Researcher and Professor advancing the integration of technology-enhanced learning environments through evidence-based methodologies with a focus on cross-reality learning spaces and laboratories. Expert in conducting studies that bridge theoretical frameworks with practical applications across diverse instructional contexts, transform pedagogical practices, and promote effective learning. His work synthesizes instructional, technical, and organizational perspectives to drive student success.

Academic Appointments

04/2023 –
present

W2 Professor for Engineering Education Research

(until 12/2025 Professor for Technical Education Research)
School of Mechanical Engineering and Safety Engineering
University of Wuppertal, Wuppertal, Germany

Funded Research Projects:

- *Gefahr erkannt - Gefahr gebannt: Ein interdisziplinärer Lehransatz zur Konzeption, Umsetzung und Erprobung VR-basierter Lernumgebungen zur sicheren Entsorgung von Gefahrstoffen [Interdisciplinary instructional design concept for teaching disposal of hazardous material in VR]*
Project Focus: Development of a VR laboratory environment for the instruction of the disposal of hazardous material for teacher training in chemical engineering.
Grant Details: Co-PI | University of Wuppertal internal grant for instructional innovation | 174,653 EUR | 03/2026 - 03/2028
- *ImmersiveWeldEd: AR-Lehr-Lernsituationen von Lehramtsstudierenden für die berufliche Bildung im Kontext Schweißtechnik [AR-based instruction in welding technology for vocational teacher training]*
Project Focus: Development of an instructional framework and use cases to introduce a VR-based welding simulator in vocational education.
Grant Details: PI | Stifterverband and Mercedes-Benz Fonds | 49,908 EUR | 08/2025 - 10/2026
- *DiMi_Learn: Digitales Mikroskop zur Steigerung der Methodenkompetenz in den Ingenieurwissenschaften [Digital Microscope for the Development of Methodological Competence in Engineering Education]*
Project Focus: Digital competency development in engineering education through innovative digital microscopy development and integration.

- Grant Details: Co-PI | Stiftung Innovation in der Hochschullehre: Freiraum 2025 | 398,779 EUR | 04/2025 - 03/2027
- *SKiLLs: Simulationsspiel zur Kompetenzentwicklung in interdisziplinären Lehr-Lernszenarien [Development of a Simulation for Competence Development through Interdisciplinary Instructional Scenarios]*
Project Focus: Interdisciplinary learning through simulation-based competence development.
Grant Details: Co-PI | Stiftung Innovation in der Hochschullehre: Freiraum 2025 | 390,267 EUR | 04/2025 - 03/2027
 - *KICK 4.0: KI-Chat-Kompetenzen im Labor [Competencies for AI chat-tools in Laboratory-based Instruction]*
Project Focus: AI integration in laboratory-based engineering education through natural language processing tools.
Grant Details: PI | Stiftung Innovation in der Hochschullehre: Freiraum 2023 | 388,730 EUR | 04/2024 - 03/2026 | Collaboration with the TU Dortmund University

Pending Research Proposals:

- *Die Ingenieure ohne Grenzen Challenge: Nachhaltigkeit, Globalisierung und soziale Verantwortung erleben in einer MINT-Hochschullehre „mit Mehrwert“ [The Engineers without Borders Challenge: Experiencing Sustainability, Globalization and Social Responsibility in STEM Higher Education]*
Project Focus: Integration of an instructional concept for service-learning projects with Engineers without Borders Germany
Grant Details: Co-PI | Klaus Tschira Stiftung | 392,069 EUR | 03/2026 - 08/2028 | Collaboration with TH Cologne University of Applied Sciences
- *LOKMotiv: Intrinsische Motivationsfaktoren zur Durchführung von Lernortkooperationen [Intrinsic Factors of Motivation for Collaboration across Educational Providers]*
Project Focus: Development of a framework to understand, describe and enhance intrinsic motivation for collaboration between educational providers in vocational education
Grant Details: PI | Klaus Tschira Stiftung | 317,111 EUR | 05/2026 - 04/2028

Advisory Board Roles for Funded Research Projects:

- *REDTAIL: Remote Experimentation and Digital Twinning for Accessible and Innovative Learning*
Project Focus: Development of accessible remote experimentation and digital twin technologies for electrical engineering education.
Advisory Board Role: Member | Leading institution: University of Washington | 07/2024 - 06/2027
- *CrossLab: Flexibel kombinierbare Cross-Reality Labore in der Hochschullehre [Flexibly combinable cross-reality labs in university teaching: sustainable skills development for learning and working 4.0]*
Project Focus: Cross-reality laboratory integration for advancing Industry 4.0 competencies in engineering education.
Advisory Board Role: Member | Leading institutions: TU Dortmund University, Technical University Ilmenau, Nordakademie gAG | 08/2021 - 12/2025

04/2024 –
present

Adjunct Assistant Professor

School of Environmental, Civil, Agricultural and Mechanical Engineering (ECAM) & Engineering Education Transformations Institute (EETI)
College of Engineering, University of Georgia, Athens, USA

02/2018 –
03/2023

Assistant Professor for Engineering Education Research

School of Environmental, Civil, Agricultural and Mechanical Engineering (ECAM) & Engineering Education Transformations Institute (EETI)
College of Engineering, University of Georgia, Athens, USA

Funded Research Projects:

- *CMaT Sub Grant: Virtual Laboratories in Cell Manufacturing Training for the Future of Workforce Development*
 Project Focus: Implementation of virtual laboratory environments for advancing cell manufacturing workforce training.
 Grant Details: PI | US National Science Foundation through Georgia Institute of Technology | \$60,000 | 05/2022 - 04/2024
- *EAGER: Investigating the rapid transition from face-to-face to exclusively online engineering laboratory classes in an Electrical and Computer Engineering program*
 Project Focus: Analysis of emergency remote teaching transition in engineering laboratory education.
 Grant Details: PI | US National Science Foundation RFE:EAGER | \$300,000 | 08/2020 - 07/2024
- *IRM: The ProQual Institute for Research Methods in STEM Education – A Novel Problem-Led and Research-Quality-Focused Approach*
 Project Focus: Development of innovative research methods training for STEM education.
 Grant Details: Co-PI | US National Science Foundation EHR:BCSER | \$1,000,000 | 01/2020 - 12/2023
- *Introducing and evaluating remote labs in engineering education through the example of VISIR*
 Project Focus: Implementation and assessment of remote laboratory systems in engineering education at the example of circuit building.
 Grant Details: PI | UGA Junior Faculty Seed Grant | \$20,000 | 08/2019 - 05/2020
- *Research center for immersive and industry-connected Cross-Reality Learning Spaces in Engineering Education*
 Project Focus: Building authentic, situated, collaborative, and virtual learning experiences for 21st century engineers.
 Grant Details: PI | UGA CENGR Collaboration Seed Grant | \$30,000 | 07/2018 - 12/2019

Institutional Research Community and Capacity Building:

- *EETI Innovative Teaching Lab Group*: Founding and leading a group of faculty members dedicated to the introduction of and research on augmented, remote and virtual experimentation laboratories into the College of Engineering at UGA (12/2018 – 03/2023)

10/2010 –
01/2018

Research Associate and Project Lead in Engineering Education Research

Center for Higher Education (zhb)
TU Dortmund University, Dortmund, Germany

Funded Research Projects (excerpt):

- *ELLI (Part I & II): Excellent Teaching and Learning in Engineering Education*
Project Focus: Advancing excellence in engineering education through comprehensive teaching and learning innovation.
Grant Details: Co-PI | German Federal Ministry for Education and Research | 2.4 million EUR at TU Dortmund University | 10/2011 - 12/2020
Partners: RWTH Aachen University, Ruhr University Bochum
- *ABEKO: Assistance system for a demographically-sensitive and company-specific competence management for production and logistic processes in the future*
Project Focus: Development of demographic-aware competence management systems for industry.
Grant Details: Co-PI | German Federal Ministry for Education and Research | 1.8 million EUR | 01/2013 - 03/2017
- *Innov'ing 2020: Les ingénieurs et l'innovation: nouveaux métiers, nouvelles formations* Project Focus: Engineering innovation and new approaches to professional formation.
Grant Details: Co-PI | The French National Research Agency | 60,000 EUR | 01/2015 - 12/2016
Partners: École Nationale Supérieure de Techniques Avancées Bretagne
- *MINTReLab: International Manufacturing Remote Lab*
Project Focus: Development of international remote laboratory infrastructure for manufacturing education.
Grant Details: Co-PI | Stifterverband | 50,000 EUR | 01/2015 - 03/2017
- *Competence Center for Higher Engineering Education TeachING-LearnING.EU*
Project Focus: Establishing excellence in engineering education through interuniversity collaboration.
Grant Details: Co-PI | Stifterverband and Volkswagenstiftung | 500,000 EUR | 10/2010 - 04/2014
Partners: RWTH Aachen University, Ruhr University Bochum

 Editorships & Editorial Leadership

2023	Guest Editor Special Issue Online laboratories in higher engineering education: Solutions, challenges, and future directions from a pedagogical perspective, <i>European Journal of Engineering Education (EJEE)</i> Co-Editors: D. May, C. Terkowsky, D. Boehringer, & V. Varney
2023	Guest Editor Special Issue Online labs and virtual experimentation in higher education, <i>Journal of Computing in Higher Education (JCHE)</i> Co-Editors: D. May, I. Jahnke, & S. L. Moore
2023 – present	Associate Editor for the European Journal of Engineering Education (EJEE)
2021 – present	Editor-in-Chief for the International Journal of Emerging Technologies in Learning (iJET) Associate Editor in Chief since 2018

Professional Service & Leadership

2024 – present	<p>Elected Member of the Board of Examiners for Mechanical Engineering at the University of Wuppertal Ensuring that the assessment and degree-related regulations are complied with and that the assessment and graduation processes are carried out according to the regulations</p>
2024 – present	<p>Elected Member of the Faculty Council for the School of Mechanical Engineering and Safety Engineering at the University of Wuppertal Supporting the School's leadership for all matters relating to research, teaching, and administration, as well as for the faculty regulations</p>
2023 – present	<p>Officer for Division in American Society for Engineering Education (ASEE) Division: International Division Current Role: Program Chair</p>
2020 – present	<p>Officer for Division in American Society for Engineering Education (ASEE) Division: Experimentation and Laboratory Oriented Studies Division Current Role: Division Chair</p>
2021 – present	<p>President of the International Association of Online Engineering (IAOE) Executive Committee Member and Vice President since 2018</p>
2021 – 2022	<p>Project Panel Reviewer for National Science Foundation (NSF) Regular Review Panelist for the PFE: Research Initiation in Engineering Formation (PFE: RIEF) program</p>
2023 – present	<p>General Chair for the annual International Conference on Smart Technologies & Education (STE) Organized by the International Association of Online Engineering (IAOE), the Edunet World Association (EWA), and the International Education Network (EduNet)</p>
2018 – present	<p>Scientific Committee Member for biennial Experiment @ International Conference (Ex.Pat) Organized by the University of Porto and University of Coimbra</p>
2016 – 2023	<p>International Advisory Board Member for the annual International Conference on Remote Engineering and Virtual Instrumentation (REV) Organized by the International Association of Online Engineering (IAOE)</p>
	<p>Professional Associations and Scholarly Memberships:</p> <ul style="list-style-type: none"> ▪ Member of International Federation of Engineering Societies (IFEES) ▪ Member of American Society of Engineering Education (ASEE) ▪ Member of International Association of Online Engineering (IAOE) ▪ Member of European Society for Engineering Education (SEFI) ▪ Member of International Society for Engineering Pedagogy (IGIP) ▪ Member of Scientific Society for Engineering Education (IPW) ▪ Founding Member of Community Working Group Online Laboratories supported by Hochschulforum Digitalisierung ▪ Member of the VR/AR Competence Network at the University of Wuppertal

Teaching, Advising, & Mentoring Experience

2023 – present

Developed, /or (co-)taught, and continuously evaluated the following courses at the University of Wuppertal:

- DDT-Ga – Teaching Methodologies I
- DDT-Gb – Profession-related Methodologies
- DDT-Gc – Teaching Methodologies II

- DDT-MA/MBb – Instructional Design of Experiments in Mechanical Engineering

- DDT-EA/EBa – Teaching Methodologies in Electrical Engineering
- DDT-EA/EBb – Instructional Design of Experiments in Electrical Engineering

- DDT-BA/BBa – Teaching Methodologies in Civil Engineering
- DDT-BA/BBb – Instructional Design of Experiments in Civil Engineering

- DDT-S1a – Assessment in Instructional Design

- Laboratory course for Safety Engineering students – Engineers without Borders Challenge

Advisor, Mentor, and Doctoral Advisory Committee Member for PhD students in Engineering, Engineering Education, and Technical Education at the University of Wuppertal:

- Regular supervisor and advisory committee member for bachelor and master theses in engineering, engineering education, and technical education

- Doctoral supervisor for Johannes Kubasch (Topic: *Large Language Models in Higher Engineering Education*; School of Mechanical Engineering and Safety Engineering University of Wuppertal; graduation expected 2028)
- Doctoral supervisor for Marcel Freimuth (Topic: *Enhancing Collaboration among Educational Providers in Vocational Training*; School of Mechanical Engineering and Safety Engineering University of Wuppertal; graduation expected 2028)
- Doctoral supervisor for Marcel Schade (Topic: *Future-proofing Engineering Education - Design perspectives for cross-reality laboratories in engineering education*; School of Mechanical Engineering and Safety Engineering University of Wuppertal; graduation expected 2027)
- Second doctoral supervisor for Karsten Schmidtseifer (Topic: *Sustainability and Repairability as Design Requirement for Technical Devices and Consumer Products*; School of Mechanical Engineering and Safety Engineering University of Wuppertal; graduation expected 2026)

- External doctoral advisory committee member for Landon Todd Smith (Topic: *The relationship between imposter syndrome and self-efficacy, perfectionism, and belonging for engineering undergraduates*; College of Engineering, UGA; graduation expected 2027)
- External mentor and doctoral advisory committee member for Deborah Moyaki (Topic: *Emerging Technologies in Higher Education and Workforce Development*; College of Engineering, UGA; graduation expected 2026)

- External second doctoral supervisor for Mesut Alptekin (Topic: *Development of an augmented reality-based application as a preparatory measure for the laboratory practical course in*

electrical engineering based on a design-based research approach; Department of Technical Education, University of Paderborn; graduated 2025)

- External mentor and doctoral advisory committee member for Dr. Isaac D. Dunmoye (Topic: *Toward a theory-informed framework for collaborative virtual reality in engineering education: Integrating community of inquiry and self-regulated learning*; College of Engineering, UGA; graduated 2025)
- External doctoral advisory committee member for Dr. Marcos Jose Inonan Moran (Topic: *Addressing Digital Inequalities and Promoting Equitable Access through the Development of an Open-Source Scalable Software-Defined Radio Remote Laboratory*; Department of Electrical and Computer Engineering, University of Washington; graduated 2024)

2018 – 2023

Developed, /or (co-)taught, and evaluated the following courses at the College of Engineering at the University of Georgia:

- *ENGR 9300 – Graduate Research Group Seminar*: Graduate research group seminar with weekly meetings designed to complement the students' exposure to issues in research design as well as methods and familiarize them with the engineering education research field.
- *ENGR 8990 – Advanced Topics in Engineering 62920: Introduction to Technology-enhanced Teaching and Learning in Engineering Education and related STEM Fields*: Course introduces students to the still-emerging field and discipline of technology-enhanced teaching and learning in engineering education and other related STEM fields from a historical, methodological, and content perspective.
- *MCHE 4910/AENG 4910 – Senior Capstone Design I*: Faculty Advisor and Mentor for student design teams.
- *ENGR 4570/6570 – International Engineering Project Management* (study abroad course format as part of the *International Engineering and Internship* program): Course presents theory, principles, techniques, and issues of project management in international engineering contexts and assist students in developing the necessary skills needed for managing engineering projects.
- *MCHE 2990 – Engineered Systems in Society*: Course introduces students to socio-technical complexity and explores ways to conceptually understand, systematically analyze, and holistically engage in engineering settings that are characterized by social, cultural, economic, and ecological factors.
- Developed and co-taught study abroad program on *International Engineering and Internship* for UGA engineering students in Valencia, Spain.

Advisor, Mentor, and Doctoral Advisory Committee Member for PhD students in Engineering and Engineering Education Research at the University of Georgia:

- Doctoral advisory committee member (Major Professor) for Isaac D. Dunmoye (Topic: *Toward a theory-informed framework for collaborative virtual reality in engineering education: Integrating community of inquiry and self-regulated learning*; College of Engineering, UGA)
- Doctoral advisory committee member (Major Professor) for Deborah Moyaki (Topic: *Emerging Technologies in Higher Education and Workforce Development*; College of Engineering, UGA)
- Doctoral advisory committee member for Adurangba Victor Oje (College of Engineering, UGA, graduated 2022)

- Doctoral advisory committee member for Olanrewaju Paul Olaogun (College of Engineering, UGA, graduated 2021)
- External mentor and second doctoral supervisor for Dr. Claudius Terkowsky (Topic: *Laboratory Pedagogies in the Making: Exploring a Desideratum in Higher Engineering Education*; Department of Educational Sciences and Psychology, TU Dortmund University; graduated 2021)
- Faculty advisor for Global Engineering Student Club (now: Engineers Without Borders Student Club) at the College of Engineering

2012 – 2018

Developed, /or (co-)taught, and evaluated the following courses at the TU Dortmund University:

- *Engineering and Mobility in a Globalized World*: Transnational online engineering course for international students in preparation for their stay in Germany using remote laboratory equipment
- *Engineering the Future – A Global Endeavor*: Transnational online engineering course in co-operation with University of Virginia for German and US students on global engineering practice and ethical reasoning in engineering
- *Fit for Science – Performing, Organizing, and Presenting Scientific Work in Engineering with Mobile Devices*: Seminar for engineering students to develop scientific working skills

Education

2012 – 2017

Doctor of Engineering in Mechanical Engineering (equivalent to PhD)

TU Dortmund University in Dortmund, Germany
 Institute for Forming Technology and Lightweight Construction (IUL)

- Dissertation: *Globally Competent Engineers: Internationalization of Engineering Education at the example of Production Engineering [original: Globally Competent Engineers: Internationalisierung der Ingenieurausbildung am Beispiel der Produktionstechnik]*; Supervisors: Prof. A. E. Tekkaya and Prof. U. Wilkesmann
 Awarded degree: Dr.-Ing. / PhD equivalent

2005 – 2010

Diplom-Ingenieur (Dipl.Ing.) in Industrial Engineering (Production Management)

TU Dortmund University in Dortmund, Germany

- Diploma thesis: *Development of a practice-oriented training concept for further education in industrial engineering*
- Honored as ‘Best Graduate of 2011 in Industrial Engineering’ at the College of Engineering and awarded ThyssenKrupp Student Award for outstanding academic performance and an excellent final thesis.

Professional Development

Professional Development in Instructional Design

- Certificate *Multipller for Higher Education Instruction*: Successful completion of one-year advanced training course with special focus on developing the ability to train representatives from higher education institutions for curriculum development and instructional excellence processes.
- Certificate *Professional Competence for Higher Education Teaching*: Successful completion of certification program for professional teaching at higher education institutes covering the topics teaching, learning, assessing, evaluating, advising, and innovation in education. Certificate proves teaching qualification of young researchers in Germany and is aligned with the curriculum of the German Society for Higher Education (dghd)

Presentations

Invited Keynotes, Presentations, & Panels

- May, D. (2025, July). *Cross-Reality Laboratories in Engineering Education: A Practice- and Research-oriented Exploration*. Invited keynote at IEEE German Education Conference GECon 2025, IEEE Germany Section and Nordakademie Hamburg, Hamburg, Germany.
- May, D. (2024, December). *Cross-Reality Labs in the Context of Engineering Education Research and Teaching Practice*. Invited presentation at CrossLabs meets Friends project meeting, Dortmund, Germany.
- May, D. (2023, June). *XR Laboratories in the Context of Engineering Education Research and Practice*. Invited keynote at HIS Forum on Laboratories 2023, Institut für Hochschulentwicklung e. V. (HIS-HE), Germany.
- May, D. (2022, October). *Knowledge Construction in Engineering Education Research – Assessing the Role of Journals, Books, Conferences, and Other Products of Research*. Invited panelist at Frontiers in Education (FIE) Conference 2022, Uppsala, Sweden. Panel with A. Johri, K. Edström, X. Du, & J. Mitchell.
- May, D. (2021, June). *Connecting Cross-Reality Learning Spaces and Online Laboratories through Engineering Education Research*. Invited keynote at International e-Engineering Education Services Conference 2021, Tafila Technical University, Jordan. [virtual]
- May, D. (2021, May). *Online Laboratories and Cross-Reality Spaces in Engineering Education Research*. Invited keynote at FacING Digitalization: Innovative und zeitgemäße Bildung in den Ingenieurwissenschaften [FacING Digitalization: Innovative and contemporary education in engineering sciences], Cologne Technical University, Germany. [virtual]
- May, D. (2020, October). *How Cross Reality Technology is Changing Engineering Education*. Invited keynote at 9th International Conference on Interactive Collaborative and Blended Learning (ICBL 2020), McMaster University, Canada. [virtual]
- May, D. (2019, July). *Online Experimentation and MOOCs for Modern Engineering Education*. Invited keynote at the 3rd International Forum for Online Engineering Education, Institute of Education at Tsinghua University & International Centre for Engineering Education (UNESCO-ICEE), Beijing, China.
- May, D. (2019, July). *Online Experimentation in the Light of Engineering Education Research and Practice*. Invited keynote at Tsinghua-IIDEA Workshop Engineering Education for Sustainable Development, Tsinghua University, Beijing, China.

- May, D. (2019, May). *Vielfalt in der Ingenieurwissenschaftlichen Lehre – Internationalisierung und Digitalisierung als Chance [Diversity in engineering education: Internationalization and digitalization as an opportunity]*. Invited keynote at VDI Conference Engineering Diversity, RWTH Aachen, Germany.
- May, D. (2019, February). *Remote Experimentation in the Light of Engineering Education Research and Practice*. Invited keynote at 16th International Conference on Remote Engineering and Virtual Instrumentation (REV), BMS College of Engineering, Bengaluru, India.
- May, D. (2018, December). *Internationalisierung durch Remote Labore am Beispiel des MMT – Master of Science in Manufacturing Technology at TU Dortmund University [Internationalization through remote laboratories using the example of MMT - Master of Science in Manufacturing Technology at TU Dortmund]*. Invited keynote at Expert Workshop Remote Laboratories in Germany, TU Dortmund, Germany.
- May, D. (2018, November). *Chancen der digitalen Studienvorbereitung am Beispiel des MMT – Master of Science in Manufacturing Technology an der TU Dortmund [Opportunities for digital study preparation using the example of MMT - Master of Science in Manufacturing Technology at TU Dortmund]*. Invited keynote at KI2VA Conference Networked University – Networks for Teaching, TU Darmstadt, Germany.

Workshop Leads

- Edström, K., de Andrade, M., Bernhard, J., Chance, S., Björklund, T., Thomson, G., Broadbent, R., May, D., Mitchell, J., Saunders, F., & Ventura-Medina, E. (2025, September). *Reviewing Manuscripts in Engineering Education Journals – Joint Reflections and Advice*. Workshop at SEFI Annual Conference 2025, European Society for Engineering Education (SEFI), Tampere, Finland.
- Kubasch, J. & May, D. (2025, July). *KICK 4.0 – AI Chatting Skills in the Engineering Laboratory*. Workshop at IEEE German Education Conference GECon 2025, IEEE Germany Section Nordakademie Hamburg, Hamburg, Germany.
- May, D., Terkowsky, C., & Kubasch, J. (2024, September). *KICK 4.0 – AI Chatting Skills in the Engineering Laboratory*. Workshop at the 27th International Conference on Interactive Collaborative Learning (ICL) and 53rd International Conference on Engineering Pedagogy (IGIP), Tallinn, Estonia.
- May, D., Kist, A., Verner, I., & Bhimavaram, K. R. (2024, March). *Overcoming Traditional Boundaries of STEM Education and Enabling the Engineer of the Future*. Workshop at the International Conference on Smart Technologies and Education (STE), Helsinki, Finland.
- May, D., Kist, A., Alves, G., Skytt, K., Verner, I., & Pozzo, M. I. (2023, March). *Transcending the Traditional Boundaries of STEM Education with Online Laboratories*. Workshop at the International Conference on Remote Engineering and Virtual Instrumentation (REV), Thessaloniki, Greece.
- May, D., Kist, A., Alves, G., Skytt, K., Verner, I., & Pozzo, M. I. (2022, September). *Overcoming Instructional Boundaries through Online Laboratories in Engineering Education*. Workshop at the International Conference on Interactive Collaborative Learning (ICL), Vienna, Austria.
- May, D., Johnsen, K., & Varney, V. (2020, June). *Mixed Reality in Engineering Education: How Does it Affect User Experience, Motivation, and Student Performance?*. Workshop at the ASEE Annual Conference & Exposition. [virtual]
- May, D. (2019, July). *Online Experimentation in the Light of Engineering Education Research and Practice*. Workshop at the Tsinghua-IIDEA Workshop Engineering Education for Sustainable Development, International Centre for Engineering Education (UNESCO-ICEE), Tsinghua University, Beijing, China.

- May, D., Varney, V., Orduna, J. P., & Auer, M. (2019, June). *Evaluating Remote and Virtual Laboratories in STEM Disciplines*. Workshop at the ASEE Annual Conference & Exposition, Tampa, FL, United States. Sponsored by the Global Online Laboratory Consortium.
- May, D., Azad, A., Auer, M., & Bhimavaram, K. R. (2018, June). *Remote Laboratories for Engineering Education*. Workshop at the ASEE Annual Conference & Exposition, Salt Lake City, UT, United States. Sponsored by the Global Online Laboratory Consortium.
- May, D., Ortelt, T. R., Terkowsky, C., Kruse, D., Kuska, R., Stehling, V., Janßen, D., & Groß, K. (2017, March). *How to Evaluate and Enhance Remote and Virtual Learning Environments in STEM Disciplines*. Workshop at the 14th International Conference on Remote Engineering and Virtual Instrumentation (REV), Columbia University, New York, NY, United States.
- May, D., & Ortelt, T. (2016, October). *ING-International: Ingenieurausbildung transnational, digital und fachspezifisch gestalten [ING-International: Designing engineering education transnationally, digitally and subject-specifically]*. Workshop at Wie international soll MINT sein?, Berlin, Germany. With the MOOC@TU9 consortium. Sponsored by Stifterverbandes and Förderprogramm MINTernational.
- May, D., Ortelt, T. R., Schuster, K., & Kuska, R. (2015, June). *Fachbezogener Workshop 1-1: Ingenieurwissenschaften [Subject-specific Workshop 1-1: Engineering Sciences]*. Workshop at Fachtagung Lehr- und Lernformen of Qualitätspakt Lehre [Conference Teaching and Learning Forms of Quality Pact for Teaching], Leipzig, Germany.
- May, D., & Jungmann, T. (2015, May). *Prüfungsformen in Studienprojekten mit großen Gruppen [Assessment Forms in Study Projects with Large Groups]*. Workshop at 6th Dortmund Spring School for Academic Staff Developers Was ist gute Lehre [What is good teaching], TU Dortmund University, Dortmund, Germany.

Publications

Professional & Popular Publications

- Perova-Mello, N., & Pitterson, N. (Hosts). (2021). Online laboratories in engineering education with Dr. Dominik May [Audio podcast episode]. In: *Reflective Teaching in a Digital Age*. Buzzsprout.
<https://reflectiveteaching.buzzsprout.com/1384834/8795267-online-laboratories-in-engineering-education-with-dr-dominik-may>
- May, D. (2021). Online laboratories and cross-reality in engineering education. In: *Research Outreach Connecting Science with Society*, 125, 42-45.
- May, D. (2020). Wie Cross Reality die Hochschullehre verändern kann und wird [How cross reality can and will change higher education teaching]. In: *Hochschulforum Digitalisierung*.
<https://hochschulforumdigitalisierung.de/de/blog/wie-cross-reality-die-hochschullehre-veraendern-kann-und-wird>

Books & Edited Volumes

- Auer, M., Langmann, R., May, D., & Morales, M. (Eds.). (in press). *Smart Technologies for a Sustainable Future: Proceedings of the 22nd International Conference on Smart Technologies & Education* (Vol. 1). Springer, Cham.
- Auer, E. A., & May, D. (Eds.). (2026). *2025 Yearbook of Emerging Technologies in Learning* (Vol. 1). Springer, Cham.
- Auer, E. A., & May, D. (Eds.). (2025). *2024 Yearbook of Emerging Technologies in Learning* (Vol. 1). Springer, Cham.

- May, D. (Section Ed.). (2024). Section: Emerging Technologies in Higher Education. In E. V. Vidal, U. R. Cukierman, & E. A. Auer (Eds.), *Advanced Technologies and the University of the Future* (Vol. 1). Springer, Cham.
- May, D., Auer, M., & Kist, A. (Eds.). (2024). *Online Laboratories in Engineering and Technology Education: State of the Art and Trends for the Future* (Vol. 1). Springer, Cham.
- Auer, M., Langmann, R., May, D., & Roos, K. (Eds.). (2024). *Smart Technologies for a Sustainable Future: Proceedings of the 21st International Conference on Smart Technologies & Education* (Vol. 1). Springer, Cham.
- Auer, M., Pester, M., & May, D. (Eds.). (2022). *Learning with Technologies and Technologies in Learning: Experiences, Trends and Challenges in Higher Education* (Vol. 1). Springer.
- Auer, M. E., & May, D. (Eds.). (2021). *Cross Reality and Data Science in Engineering: Proceedings of the 17th International Conference on Remote Engineering and Virtual Instrumentation*. Springer International Publishing.
- Terkowsky, C., May, D., Haertel, T., Lensing, K., Frye, S., Ortelt, T. R., & Hurst, S. (Eds.). (2020). *Labore in der Hochschule: Didaktik, Digitalisierung, Organisation [Laboratories in Higher Education: Didactics, Digitalization, Organization]*. wbv Publikation.
- May, D. (2017). *Globally Competent Engineers: Internationalisierung der Ingenieurausbildung am Beispiel der Produktionstechnik [Globally Competent Engineers: Internationalization of Engineering Education Using the Example of Production Technology]* (Vol. 95) [Doctoral dissertation, TU Dortmund University]. Shaker Verlag.
- Neubauer, D., Löcken, J., Haertel, T., May, D., Radtke, M., & Dehler, J. (2017). *Praxis-Leitfaden zur Gestaltung demografiesensibler beruflicher Weiterbildung [Practical Guide for Designing Demography-Sensitive Professional Development]*. Center for Higher Education, TU Dortmund University.
- Tekkaya, A. E., Jeschke, S., Petermann, M., May, D., Friese, N., Ernst, C., Mueller, K., & Schuster, K. (Eds.). (2013). *TeachING-LearnING.EU Discussions: Innovationen für die Zukunft der Lehre in den Ingenieurwissenschaften [Innovations for the Future of Teaching in Engineering Sciences]*. TeachING-LearnING.EU.
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01/02/2026, Wuppertal, Germany