



NETZWERK VIRTUAL REALITY
IN DER FREMDSPRACHENFORSCHUNG
UND -DIDAKTIK



Leibniz
Universität
Hannover

International Symposium: VR- and AI-assisted foreign language learning

July 2-3, 2026
at the University of Bamberg



Chair of English Language Education (University of Bamberg)

&

Department of Romance Languages and Literatures (Leibniz University Hannover)

Organizers:

This event is organized by the Universities of Bamberg (Prof. Dr. Theresa Summer with Martina Ebenberger, Rebecca Flämig, Claudia Schnellbögl, Michelle Zirkel) and Hannover (Dr. Jennifer Wengler) in cooperation with the project BaTEGS (Dr. Jaroslaw Jasenowski) with funding from the Federal Ministry of Research, Technology and Space and the German Academic Exchange Service and funding from the DGFF (*Deutsche Gesellschaft für Fremdsprachenforschung*).



Program

July 1: Pre-conference get-together

Option for early arrivals: Join us for an informal get-together from 7pm at the local beer garden “Wilde Rose Keller” ([Oberer Stephansberg 49, 96049 Bamberg](#)). It’s a nice walk up the hill from the city center (approx. 15 minutes).

No registration needed, feel free to join us spontaneously! Look out for a poster of the symposium to find our table.

July 2-3: Symposium

Location of the symposium: LanguageLLab ([Luitpoldstr. 19, 96052 Bamberg](#))

How to get there: Walk into the main building (Luitpoldstr. 19) through the main entrance, up a few steps and turn right. Go through the door and you will find room LU19/00.09.



July 2: Day 1

9:30 am

Arrival

10:00 am

Welcome & warm-up

10:30 am

Keynote Regina Kaplan-Rakowski: VR-assisted language learning

11:30 am

Moonshot session 1: Transformative learning in VR: Language, communication, and creativity

12:30 pm

Lunch break & joint discussion

1:30 pm

Moonshot session 2: Culture & global citizenship in the age of intelligent virtual worlds

2:30 pm

Coffee & tea break

3:00 pm

Moonshot session 3: Rethinking didactic frameworks for AI and VR

4:00 pm

Reflections on day 1

4:30

Hotel check-in

6:00 pm

Walk & talk: Guided tour through Bamberg (Meeting point: [Luitpoldstraße 19, 96052 Bamberg](#))

7:00 pm

Dinner at Domterrassen ([Unterer Kaulberg 36, 96049 Bamberg](#))



July 3: Day 2

9:00 am

Moonshot session 4: Transforming speaking practice with AI & VR

9:45 am

Coffee & tea break

10:00 am

**Joint keynote by Sophie Jörg & Stefan Ultes: Bridging AI, VR, and language learning:
An interdisciplinary conversation**

11:00 am

Workshop by students

12:00 pm

Lunch break & joint discussion

1:30 pm

World Café: Reaching for the stars (wrap-up by all participants)

2:30–3:00 pm

Closing



Formats

- Keynotes: The first keynote is scheduled for a 45-minute talk followed by a Q&A-session. The interdisciplinary keynote is scheduled for two 10-minute talks followed by a discussion and Q&A-session.
- Moonshot sessions: These consist of several 5-minute presentations followed by a Q&A-session.
- Workshop by students: In this workshop, university students from a seminar will share their VR- and AI-assisted teaching concepts.
- World Café: This is a collaborative session that brings all participants together at tables in small groups to discuss relevant questions.

Guideline for Q&A

When asking a question, please 1) briefly introduce yourself and 2) ask one clear, concise question. We kindly ask you to avoid long preambles, personal anecdotes, or self-promotional remarks. Thank you.



Keynote: VR-assisted language learning



Regina Kaplan-Rakowski

Assistant Professor of Learning Technologies
at the University of North Texas

Regina Kaplan-Rakowski is an Assistant Professor of Learning Technologies at the University of North Texas, the President of the Computer-Assisted Language Instruction Consortium (CALICO), and Associate Editor of the Australian Journal of Applied Linguistics (AJAL). Her research interests include immersive learning technologies, emotional responses to learning technologies, and computer-assisted language learning.



Joint keynote: Bridging AI, VR, and language learning: An interdisciplinary conversation



Sophie Jörg

Professor of Computer Graphics at the University of Bamberg.

Prof. Dr. Sophie Jörg is Professor in Computer Graphics at the University of Bamberg, and a member of the executive board of the Center for Innovative Applications of Computer Science. Her group conducts research in character animation, motion perception, and virtual and augmented reality. Before joining the University of Bamberg in 2023, she led the Character Animation and Motion Perception research lab at Clemson University. She received her PhD from Trinity College Dublin in 2011 and was a postdoctoral researcher at Carnegie Mellon's Graphics Lab. In 2017, she received the National Science Foundation's CAREER Award. Sophie Jörg's research has been published in leading computer science conference proceedings and journals, such as ACM Transactions on Graphics (SIGGRAPH) and IEEE Transactions on Visualization and Computer Graphics (IEEE VR, ISMAR).



Stefan Ultes

Professor of Natural Language Generation and Dialogue Systems at the University of Bamberg

Prof. Dr.-Ing. Stefan Ultes is professor of Natural Language Generation and Dialogue Systems at the Otto-Friedrich-University of Bamberg, Germany, and a member of the executive board of the Bamberg Center for Artificial Intelligence. Previously, he was Dialogue Research Lead at Mercedes Benz Research & Development in Sindelfingen, Germany, leading the Speech Technology research group, and Research Associate at the Spoken Dialogue Systems Group at the University of Cambridge, UK. He has received his Diploma (MSc eq.) in Computer Science from the Karlsruhe Institute of Technology, Germany, in 2010 and his doctorate (PhD) on "User-centred Adaptive Spoken Dialogue Modelling" at the Dialogue Systems Group at Ulm University, Germany, in 2015. Stefan Ultes regularly publishes in leading NLP and Dialogue System venues and frequently serves under different roles in the ACL and SIGDIAL communities. Since 2025, he has been vice president of SIGDIAL, the Special Interest Group on Dialogue and Discourse.



Moonshot Session 1: Transformative learning in VR: Language, communication, and creativity

1. Developing second language acquisition through GenAI within high-immersion Virtual Reality

(Mar Gutiérrez-Colón, Nadia Azzouz, Vanessa Serrano)

2. Empath.AI – an AI and VR-based communication training for nursing

(Isabel Hoffmann)

3. AI-supported materials development as a means of professionalization for pre- service teachers

(Lara Pincolini)

4. VR escape room for creativity

(Regina Kaplan-Rakowski, Theresa Summer, Katarzyna Hryniuk)

Moonshot Session 1: Transformative learning in VR: Language, communication, and creativity

Developing second language acquisition through GenAI within high-immersion Virtual Reality

Mar Gutiérrez-Colón: Professor at the Rovira i Virgili University (URV), Research Group in Language and Technology (ReLaTe)

Nadia Azzouz: Professor at the University of Andorra (UdA), Research Group on Languages (GREL)

Vanessa Serrano: Associate Professor at the Rovira i Virgili University (URV), Postdoctoral researcher (ReLaTe)

Abstract: This research investigates the effects of High-immersion Virtual Reality (HiVR) combined with Generative Artificial Intelligence (GenAI) on public speaking in EFL graduates. In a mixed-methods pre-post research design, participants completed repeated oral presentations in a HiVR environment, interacting with GenAI avatars that generated real-time questions and feedback. Anxiety was measured using the Personal Report of Public Speaking Anxiety (PRPSA). Results show a significant decrease in self-reported anxiety, which demonstrates that combining HiVR and GenAI can be effective in overcoming affective barriers in SLA.

References:

Canto, S., Jauregi-Ondarra, K., & Gruber, A. (2023). High-immersion virtual reality-mediated intercultural virtual exchange: A case study. In S. Di Sarno-García, S. Montaner-Villalba, A.M. Gimeno-Sanz (Eds.), *Telecollaboration Applications in Foreign Language Classrooms* (pp. 136–159). IGI Global. <https://doi.org/10.4018/978-1-6684-7080-0.ch007>

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Moonshot Session 1: Transformative learning in VR: Language, communication, and creativity

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Lee, S.-M., Wang, X., Park, I., & Lestiono, R. (2024). It feels so real! Situated authentic language learning in immersive virtual reality. *Education and Information Technologies*, 29(18), 24023–24045. <https://doi.org/10.1007/s10639-024-12807-8>

Nuesser, M., Zheng, D., & Dong, J. (2025). Optimizing affordances of high immersive virtual reality for language learning. 5(1), 113–129. <https://doi.org/doi:10.1515/jccall-2023-0006>

Parmaxi, A. (2023). Virtual reality in language learning: a systematic review and implications for research and practice. *Interactive Learning Environments*, 31(1), 172–184. <https://doi.org/10.1080/10494820.2020.1765392>

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Ye, Y., & Kaplan-Rakowski, R. (2024). An exploratory study on practising listening comprehension skills in high-immersion virtual reality. *British Journal of Educational Technology*, 55(4), 1651–1672. <https://doi.org/https://doi.org/10.1111/bjet.13481> McCroskey, J. C. (1970). Measures of communication-bound anxiety. *Speech Monographs*, 37(4), 269–277. <https://doi.org/10.1080/03637757009375677>

Moonshot Session 1: Transformative learning in VR: Language, communication, and creativity

Empath.AI – an AI and VR-based communication training for nursing

Isabel Hoffmann: Postdoctoral researcher at the Institute for German Philology and German as a Second Language at LMU Munich and independent consultant specialising in XR/AI and language development

Abstract: The successful integration of international professionals in Germany, particularly in sensitive fields such as nursing, requires targeted language support and a strong focus on empathetic communication (Stevanović 2023:257). Empath.AI addresses this need by combining scenario-based learning and storytelling with immersive VR environments and AI-driven feedback systems. The program simulates authentic workplace scenarios, enabling future nurses to practise context-appropriate German language skills. In this presentation, I will first provide an overview of the technological, and didactic background. I will then present selected findings from a pilot study, focusing on user experience (UX) and qualitative feedback provided by participants. The presentation concludes by discussing the key benefits and challenges of the approach.

References:

Stevanović, Slavica (2023): Sprachliche Anforderungen des Pflegealltags und Bedarfe ausländischer Pflegekräfte – Erste Ergebnisse aus dem Forschungsprojekt Deutscherwerb im medizinischen Pflegekontext. In: Dvorecký, Michael/Reitbrecht, Sandra/Sorger, Brigitte/Schweiger, Hannes (2023): IDT 2022: *mit.sprache.teil.haben Band 3: Sprachliche Teilhabe fördern. Berlin: Erich Schmidt Verlag GmbH & Co. KG, 257-271.

Moonshot Session 1: Transformative learning in VR: Language, communication, and creativity

AI-supported materials development as a means of professionalization for pre-service teachers

Lara Pincolini: Research assistant and PhD candidate at the University of Würzburg

Abstract: After completing a bachelor's degree as well as the first and second state examinations for teaching, I joined the TEFL Department at the University of Würzburg in September 2025 as a doctoral researcher under the supervision of Prof. Dr. Eisenmann. My research focuses on teacher professionalization and AI literacy in EFL teacher education, particularly the development of pedagogically grounded, and ethically informed approaches to generative AI.

Against the backdrop of the rapidly growing relevance of AI in educational contexts (Scheiter et al., n.d.), accompanied by considerable uncertainty and skepticism among many teachers (Bergdahl & Sjöberg, 2025; Țîru et al., 2025), my moonshot outlines my doctoral project. This project investigates how pre-service EFL teachers engage with and critically evaluate generative AI in the context of materials development. Specifically, it presents an innovative seminar design in which AI is systematically integrated into the creation of reading tasks, allowing for an examination of how pre-service teachers' practices and evaluative perspectives evolve over time through sustained, critical engagement with generative AI.

References:

- Bergdahl, N., & Sjöberg, J. (2025). Attitudes, perceptions and AI self-efficacy in K-12 education. *Computers and Education: Artificial Intelligence*, 8, 100358. <https://doi.org/10.1016/j.caeai.2024.100358>
- Scheiter, K., Bauer, E., Omarchevska, Y., Schumacher, C., & Sailer, M. (n.d.). Künstliche Intelligenz in der Schule.
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Moonshot Session 1: Transformative learning in VR: Language, communication, and creativity

VR escape room for creativity

Regina Kaplan-Rakowski: Assistant Professor of Learning Technologies at the University of North Texas, the President of the Computer-Assisted Language Instruction Consortium (CALICO), and Associate Editor of the Australian Journal of Applied Linguistics (AJAL). Her research interests include immersive learning technologies, emotional responses to learning technologies, and computer-assisted language learning.

Theresa Summer: Professor of English Language Education/TEFL at the University of Bamberg, Germany. Her research focuses on the integration of immersive virtual reality in teacher education and EFL classrooms, pop culture, global citizenship education, and learner attitudes towards English instruction in a European context.

Katarzyna Hryniuk: Associate Professor of Applied Linguistics in the Institute of English Studies, the University of Warsaw, Poland. Her research focuses mainly on foreign language didactics and the use of technology, the development of second language writing skills at all stages of education and to publish research articles, as well as foreign language teacher training.



Moonshot Session 1: Transformative learning in VR: Language, communication, and creativity

Abstract: What happens to students' creative writing when one key sense (sound) is removed in a virtual reality game? This moonshot reports on research examining the impact of sound in high-immersion virtual reality (VR) on creative writing. In this experimental study, 103 English-major students were randomly assigned to two study conditions: (1) VR with sound and (2) VR without sound. After engaging in an escape room activity in VR, we measured participants' levels of agency, enjoyment, presence, interaction, and cognitive load. Next, a follow-up creative writing task was completed (Doshi & Hauser, 2024). Eight focus group interviews (n = 47) further explored students' experiences of writing after VR, their sense of writing creativity, and the affordances and constraints they identified in relation to VR-supported creative writing. Following previous research, writing creativity is viewed in terms of originality of text (Genugten van et al., 2022; Silvia & Benedek, 2019). The study analyzes 101 essays to compare the effects of the two VR experiences on writers' creativity. The moonshot highlights the research design and shares findings on how sound in VR impacts students' creative writing processes.

References:

- Doshi, A. R., & Hauser, O. P. (2024). Generative AI enhances individual creativity but reduces the collective diversity of novel content. *Science Advances*, 10(28), eadn5290.
- Genugten van, R. D. I., Beaty, R. E., Madore, K. P., & Schacter, D. L. (2022). Does episodic retrieval contribute to creative writing? An exploratory study. *Creativity Research Journal*, 34(2), 145-158.
- Silvia, P., & Benedek, M. (2019, August 22). Creativity & arts tasks and scales: Free for public use. Retrieved from osf.io/4s9p6



Moonshot Session 2: Culture & global citizenship in the age of intelligent virtual worlds

- 1. Digitalisation and internationalisation in the primary English classroom: VR, AI and COIL**
(Motoko Abe, Raphaelle Beecroft)
- 2. VR, AI and the next leap for global citizenship in English Language Teaching**
(Maria Eisenmann)
- 3. Arguing with AI in VR: The foreign language effect on ethical negotiation**
(Alice Gruber)
- 4. Innovating cultural heritage education through Virtual Reality (VR)**
(Mareike Oesterle, Goetz Schwab)
- 5. High-immersion Virtual Reality for Education for Sustainable Development in English Language Teaching: Insights from a research project at the University of Bamberg**
(Michelle Zirkel)



Moonshot Session 2: Culture & global citizenship in the age of intelligent virtual worlds

Digitalisation and internationalisation in the primary English classroom: VR, AI and COIL

Motoko Abe: Professor of English teacher education, Tokyo Gakugei University

Raphaëlle Beecroft: Junior Professor of Primary English Language Teaching, Koblenz University. Joint research interests: Fostering ICC, Democracy Education, COIL, VR.

Abstract: This moonshot introduces VR-based materials supported by generative AI for beginner learners of English in Japanese primary schools and proposes future Japan–Germany collaboration to develop and implement VR- and AI-assisted language learning within the framework of COIL. The materials allow learners to explore authentic global environments and communicate in English with AI avatars. These immersive experiences provide meaningful opportunities to use English while encouraging learners to present their local communities to a global audience, fostering intercultural awareness. The study shows that VR and generative AI enhance motivation, willingness to communicate, and perceived authenticity, highlighting their pedagogical potential for beginner English education and international collaboration.

Moonshot Session 2: Culture & global citizenship in the age of intelligent virtual worlds

VR, AI and the next leap for global citizenship in English Language Teaching

Maria Eisenmann: Professor of Teaching English as a Foreign Language (TEFL) at the University of Würzburg, Germany. Her research examines the integration of VR and AI in Education for Sustainable Development, global education and digital media literacy. She has published widely on VR-based, sustainability-focused learning environments and has held leading roles in the BMBF-funded projects CoTeach and DiSo-SGW.

Abstract: Virtual reality has now established itself in English language teaching. After years of empirical research and the development of fully immersive social VR environments for teacher training and professional development, my work at the University of Würzburg has demonstrated how powerful VR is for competency-based intercultural learning in the context of Education for Sustainable Development and the Sustainable Development Goals (Eisenmann et al. 2021, 2022; Eisenmann & Steinbock 2023). In TEFL discourses on global citizenship education, these studies show how embodied interaction in social VR environments promotes linguistic, intercultural and ethical-reflexive competencies that are essential for sustainable English language teaching (Eisenmann & Steinbock 2024, 2025a, 2025b; Eisenmann et al. 2025). The next challenge goes beyond validation: my research explores the integration of VR and AI into intelligent learning ecosystems that respond dynamically to learners' language use, positioning and biases. This approach transforms VR from a now-proven immersive tool into an adaptive, ethically grounded infrastructure that can support SDG-oriented English language teaching.

Moonshot Session 2: Culture & global citizenship in the age of intelligent virtual worlds

References:

Eisenmann, M. & Steinbock, J. (2025a). Global Citizenship Education in virtueller Realität – ein interdisziplinäres Forschungsprojekt. In Kulovics, N., Mentz, O. & Raith, T. (Eds.). Grenzen, Grenzräume, Entgrenzungen. Perspektiven in der Fremdsprachenforschung (pp. 93-108). WBV.

Eisenmann, M. & Steinbock, J. (2025b). Promoting Global Citizenship Education among Pre-Service English Teachers: Immersive Anti-Bias Training through Social Virtual Reality. In Summer, T. & Gießler, R. (Eds.). Digital Textualities and Spaces in ELT (pp. 165-180). Narr.

Eisenmann, M., Hein, R., Latoschik, M., Steinbock, J. & Wienrich, C. (2025). Social Virtual Reality für Inter- und Transkulturelles Lernen und Lehren im Englischunterricht. In Grafe, S., Trefzger, T., Siller, H., Eisenmann, M. & Fütting-Lippert, A. (Eds.). Digitale Medien in Lehr-Lern- Konzepten der Lehrpersonenbildung in interdisziplinärer Perspektive: Ergebnisse des Forschungsprojekts Connected Teacher Education (pp. 141-158). Springer.

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Moonshot Session 2: Culture & global citizenship in the age of intelligent virtual worlds

Arguing with AI in VR: The foreign language effect on ethical negotiation

Alice Gruber: Professor of Business English at the Technical University of Applied Sciences Augsburg, Germany. Her research focuses on VR and AI for language learning, Virtual Exchange, and Global Englishes. She has published in various indexed/refereed journals, including ReCALL and TESOL Quarterly.

Abstract: This study explores how a second language (L2) influences moral belief restructuring during immersive Virtual Reality (VR) debates. It examines whether the Foreign Language Effect (FLE), characterised by cognitive distancing, applies to negotiations with AI agents, and if these agents simultaneously trigger psychological reactance (a defensive response to threatened autonomy). L2 speakers engage in voice-based VR debates on speciesism in both their L1 and L2. The goal is to see if L2 use reduces defensive barriers during AI debates, testing whether VR-AI settings can function as moral laboratories to help advanced language learners navigate sensitive and controversial intercultural discourse.

Moonshot Session 2: Culture & global citizenship in the age of intelligent virtual worlds

Innovating cultural heritage education through Virtual Reality (VR)

Mareike Oesterle: Manager of the project *eTACCHE*, University of Education Ludwigsburg, Germany

Goetz Schwab: Coordinator and professor of Applied Linguistics, University of Education Ludwigsburg, Germany

Abstract: *eTwinning Across Cultures: Collaborative Heritage Education (eTACCHE)* is project Partnership aimed at reshaping cultural heritage education across primary, secondary, and tertiary levels through Virtual Exchange (VE). It unites five teacher education institutions from Europe with the goal of embedding VE into Initial Teacher Education (ITE) via the European platform eTwinning.

A central innovation of the project is the creation and implementation of immersive 3D VR environments that allow students to virtually explore, co-construct and compare narratives around cultural heritage sites from their respective cultural contexts.

This presentation highlights results and findings from these VE initiatives, with a focus on the integration of VR tools as both content and method, enhancing engagement and intercultural awareness.

Moonshot Session 2: Culture & global citizenship in the age of intelligent virtual worlds

High-immersion Virtual Reality for education for sustainable development in English language teaching: Insights from a research project at the University of Bamberg

Michelle Zirkel: Research assistant and PhD candidate in English Language Education at the University of Bamberg. Her research interests include digital technologies in English language education with a focus on high-immersion virtual reality, language teacher education, and language education for sustainable development.

Abstract: Integrating education for sustainable development (ESD) into language education through high-immersion virtual reality (VR) has been a key focus of a research project focusing on fostering digital sovereignty among English language teachers at the University of Bamberg. As part of the Competence Network lernen:digital, this project contributes to the digital transformation of schools and teacher education by developing research-informed approaches to innovative teaching and learning. Within the project, evidence-based teacher training materials were designed to support the integration of high-immersion VR and ESD into English language classrooms. This moonshot presentation provides an overview of this research project, outlining its central research questions, methodological approaches, and participant groups, as well as published work emerging from the project and current lines of research that continue to explore the pedagogically meaningful use of VR for sustainability education and language learning.



Moonshot Session 3: Rethinking didactic frameworks for AI and VR

- 1. Walking through literature: VR, embodiment, and the future of literary learning**
(Anja Ballis, Svenja Hahn)
- 2. Step into the conversation: The potential of immersive VR in developing oracy for English language learners**
(Frauke Matz, Ondřej Duda, Alena Jůvová, Marius Ritter, Rebecca Schlieckmann)
- 3. AI competence is not optional: Teacher education at the intersection of autonomy, ethics, and algorithms**
(Katharina McGrath)
- 4. Key findings on VR-supported sequences in adult Foreign Language Education**
(Kathleen Plötner, Claudia Schlaak)
- 5. Language teaching with VR: Exploring mutual synergies of TBLT and VR affordances**
(Claudia Schnellbögl)

Moonshot Session 3: Rethinking didactic frameworks for AI and VR

Walking through literature: VR, embodiment, and the future of literary learning

Anja Ballis: Professor of German Language Education at LMU Munich. Her research focuses on digital media in literary and language education, qualitative research methodologies, and, more recently, vignette research as a methodological approach in educational studies.

Svenja Hahn: Research assistant at LMU Munich. She is currently completing her doctoral dissertation on the reception and consumption of virtual reality in German language teaching.

Abstract: Virtual reality technologies are reshaping literary and media education by transforming literature into traversable 360-degree narrative environments. Users become virtually embodied subjects whose perception, movement, and interaction co-constitute narrative structure (Dooley, 2024). Alongside adaptations of canonical texts (e.g., GoetheVR) and children's and young adult literature (e.g., Wolves in the Walls), original immersive storyworlds are emerging, though their experiential qualities remain underexplored (Mills et al., 2022). Our presentation introduces the concept of Literatur-Begehung as a spatially situated, multisensory, and kinaesthetically embodied mode of engaging with literary worlds (Ballis et al., 2025). Literature is no longer primarily read but walked through, sensed, and enacted. VR thus signals a shift from multimodal to multisensory, embodied media experience (Martin et al., 2022; Mills et al., 2022). Simultaneously, it gestures toward a postdigital experiential mode in which hybrid, interreal forms of perception become commonplace, calling for a reconceptualisation of literary education.



Moonshot Session 3: Rethinking didactic frameworks for AI and VR

References:

Ballis, A., Schwendemann, L., Hahn, S., & Hüttl, E. (2025). „Literatur begehen“ mit Virtual Reality. Zwei explorative Studien zu Goethe VR und Anne Frank House VR im Deutschunterricht. MiDU – Medien im Deutschunterricht, (MiDU – Medien im Deutschunterricht, Einzelbeiträge), 1–19. <https://doi.org/10.18716/OJS/MIDU/2025.0.2>

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Mills, K. A., Scholes, L., & Brown, A. (2022). Virtual Reality and Embodiment in Multimodal Meaning Making. Written Communication, 39(3), 335–369. <https://doi.org/10.1177/07410883221083517>



Moonshot Session 3: Rethinking didactic frameworks for AI and VR

Step into the conversation: The potential of immersive VR in developing oracy for English language learners

Frauke Matz: Chair of English language education at the University of Münster, Germany. Her research interests lie in the areas of oracy and the use of XR technologies and video games in language education. She also works in the field of cultural and literary learning, particularly in relation to human and children's rights education, peace education and language learning aptitude in the EFL classroom.

Ondřej Duda: Assistant Professor in English Language Studies at the Institute of Foreign Languages within the Faculty of Education at Palacký University, Czech Republic. His teaching portfolio includes courses on sociolinguistics, teaching methodology, and integrating ICT into education. His scholarly pursuits focus on enhancing the competencies of future English educators and exploring language learning beyond traditional classroom settings.

Alena Jůvová: Guarantor and teacher of courses covering communication science, educational theory, social education, environmental education, 21st-century skills in education, interdisciplinary educational theory, and leisure education at the Institute of Education and Social Studies within the Faculty of Education at Palacký University, Czech Republic. Her research expertise lies in enhancing the soft skills of educators and advancing teacher training methodologies.

Marius Ritter: Research assistant at the English Language Education department at the University of Münster. His research interests include fostering oracy in the primary language classroom, videogame-based language learning and XR technologies in education.



Moonshot Session 3: Rethinking didactic frameworks for AI and VR

Rebecca Schlieckmann: Senior lecturer in the English Language Education department at the University of Münster. She is a fully qualified secondary school teacher (Griffith University, Australia). Her research interests include XR technologies in education, the transition from primary to secondary school and oracy in language education.

Project presented: Pedagogical Alliance for XR-Technology in (Teacher) Education (PAX), ERASMUS

Abstract: Research has consistently shown positive effects of using VR-technology for foreign language learning (Parmaxi, 2023; Zheng et al., 2023), particularly with regard to oracy (Yan et al., 2024; Yuditseva, 2023). However, within the European secondary school context, this potential appears yet to be untapped. This might be partly due to the lack of available hard- and software, but also the lack of pedagogical conceptualizations and frameworks (Wirbacz et al., forthcoming), which build on current research on both oracy- development (Diehr, 2024; Siepmann, 2024) and immersive VR learning scenarios (Makransky & Petersen, 2021, 2023; Pitsikalis et al., 2022). This moonshot aims to address this gap by reporting on the first findings of the PAX project, in which foreign language teachers, educators and VR developers co-designed innovative teaching concepts and frameworks for the use of VR in foreign language education. This presentation discusses the project's progress, challenges and implications for secondary English language teacher education, emphasising the need for tailored frameworks to optimise VR-enhanced oracy development.

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Moonshot Session 3: Rethinking didactic frameworks for AI and VR

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Moonshot Session 3: Rethinking didactic frameworks for AI and VR

AI competence is not optional: Teacher education at the intersection of autonomy, ethics, and algorithms

Katharina McGrath: Research assistant at Friedrich Schiller University Jena and doctoral candidate in the field of foreign language teaching and learning research. In her doctoral project, she develops design principles for virtual learning environments in the context of training teachers of German as a foreign and second language. Previously, she headed the DAAD Information Centre in Sydney and worked as a DAAD lecturer at the University of the Philippines.

Abstract: Generative AI is rapidly reshaping language education, offering personalized learning, adaptive feedback, and new forms of practice, while simultaneously raising ethical, legal, and pedagogical concerns. This moonshot argues that AI competence is no longer an optional add-on but a core professional requirement for teachers. Building on empirical research and international policy frameworks, the presentation introduces a six-dimensional AI competence model encompassing a human-centered mindset, AI literacy, ethical-legal responsibility, didactic integration, diagnostic and adaptive competence, and learning agility. The focus lies on teacher education as the critical leverage point for ensuring that AI enhances learning without undermining autonomy, equity, or critical thinking. The moonshot calls for a shift from tool-centric adoption to competence-driven integration, positioning teachers as informed decision-makers, ethical gatekeepers, and designers of meaningful AI-supported learning environments.

Moonshot Session 3: Rethinking didactic frameworks for AI and VR

Key findings on VR-supported sequences in adult Foreign Language Education

Kathleen Plötner: Professor of the Didactics of Romance Languages, Literatures and Cultures at the University of Potsdam, Germany

Claudia Schlaak: Professor of Foreign Language Teaching and Learning Research: Didactics of French and Spanish at the University of Kassel, Germany

Abstract: This presentation outlines an innovation project at a Volkshochschule (VHS) integrating immersive media into language courses (French, English, German as a foreign language, Dutch, Chinese). To create a theoretically grounded foundation for designing, testing, and reflecting on VR-supported teaching sequences, a methodological-didactic framework was developed (Plötner & Schlaak 2025). The accompanying ten-month study used a multimethod design, combining semi-structured learner questionnaires with qualitative interviews of instructors, administrators, and technical staff. Data were analyzed via qualitative content analysis (Kuckartz & Rädiker 2024).

Preliminary findings highlight the need for structured, supervised VR implementation in language teaching. While small-group formats posed challenges, a specific plenary format has proven to be particularly practical for VR-supported teaching. Evaluations of VR applications revealed diverse perceptions: some were criticized for technical limitations or poor didactic alignment, whereas one was uniformly praised by instructors as practical, learning-effective, and curricularly integrable. The results prompt further research on instructor training needs and long-term impacts on learner competence development.

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Moonshot Session 3: Rethinking didactic frameworks for AI and VR

Language teaching with VR: Exploring mutual synergies of TBLT and VR affordances

Claudia Schnellbögl: Research assistant and PhD candidate in English Language Education at the University of Bamberg (Germany). Her research interests include language teacher education, high-immersion virtual reality, and the effective integration of digital technologies in school-based foreign language education.

Abstract: How can VR headsets be implemented in classroom-based English lessons? This moonshot explores how an approach to language teaching with VR that is grounded in technology-mediated task-based language learning (TMTBLT) provides guidance for future language teachers. Affordances of high-immersion VR such as contextualization, engagement, and linguistic input (Chun et al., 2022) align well with principles of TMTBLT (González-Lloret & Ortega, 2014). HiVR-tasks that purposefully integrate HiVR in a sequence with other learning activities and (non-)digital materials thus create mutual synergies between pedagogical and technological affordances. This moonshot reports findings from a longitudinal study with 24 pre-service teachers of English as a foreign language, and is based on the analysis of lesson plans, learning journals, and group interviews. The moonshot highlights the importance of purposeful HiVR-task design for language teaching with VR and gives insight in the systematic training of pre-service teachers' competences to teach with HiVR.

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Moonshot session 4: Transforming speaking practice with AI & VR

- 1. AI-VR avatars vs human role-play for L2 job interview practice: Development and first study results**
(Sina Werner, Torben Schmidt)
- 2. A virtual café for real Spanish: A classroom pilot study on immersive speaking with a VR-AI prototype**
(Julian Webb, Jennifer Wengler)
- 3. Empowering English language learners with AI-supported VR speaking tasks**
(Rebecca Flämig)

Moonshot session 4: Transforming speaking practice with AI & VR

AI-VR avatars vs human role-play for L2 job interview practice: Development and first study results

Sina Werner: Postdoctoral researcher at Leuphana University, studies task-based language interaction, Virtual Exchange and Blended Mobility, and AI/VR-supported L2 interaction.

Torben Schmidt: Professor for TEFL at Leuphana University, studies AI-supported competence development, intelligent tutorial systems, and AI/VR-supported L2 interaction.

Abstract: Practising job interviews in different environments may shape L2 development through distinct linguistic, socio-affective, and physiological pathways. This study compares an AI-driven avatar interview in immersive VR with a parallel human role-play as a typical classroom setting. We capture the overall process of this study at three levels: (1) Steps in the development and design of an AI- and VR-based role-play (2) learner experience, (3) linguistic/interactional behaviour. Data include pre/post questionnaires plus video recordings and transcripts of practice interviews, enabling process and outcome analyses. Pre/post outcomes include standardised job-interview interactional competence ratings, language-specific self-efficacy, speaking anxiety, and willingness to communicate.



Moonshot session 4: Transforming speaking practice with AI & VR

A virtual café for real Spanish: A classroom pilot study on immersive speaking with a VR–AI prototype

Julian Webb: M.Ed. in Teacher Education for Secondary Schools (English and Spanish, Leibniz University Hannover, Germany). Current interests include the pedagogically meaningful integration of VR and AI in foreign language education.

Jennifer Wengler: Research associate (Postdoc) in the Didactics of Romance Languages at Leibniz University Hannover. Her research focuses on (post-)digital educational processes in foreign language teaching and learning, cultural and affective-motivational dimensions of language learning. Her current work explores the didactic potential of virtual reality and artificial intelligence in Romance language teacher education and in French and Spanish as foreign languages.

Abstract: This presentation introduces *SpeakSpace VR*, an AI-supported virtual reality application currently being developed at Leibniz University Hannover. *SpeakSpace VR* combines immersive virtual reality with AI-powered conversational avatars to create situated, low-pressure opportunities for 1:1 speaking practice.

The contribution focuses on the conceptual, technical, and didactic development of the prototype. It also discusses how the application can be expanded modularly through further communicative scenarios and adaptive support structures.

In addition, the presentation reflects on insights from an exploratory pilot study with 16 upper-secondary students at a vocational secondary school in Germany. Initial findings suggest that learners perceived the VR environment as a safe and motivating space for practicing everyday communication and as less socially intimidating than traditional classroom interaction.

By linking app development, didactic design, and exploratory empirical insights, the contribution discusses the potential of AI-supported VR for rethinking oral interaction in foreign language education. At the same time, it addresses key challenges concerning scaffolding, the responsible use of AI conversation partners, and privacy-conscious implementation in school contexts.



Moonshot session 4: Transforming speaking practice with AI & VR

Empowering English language learners with AI-supported VR speaking tasks

Rebecca Flämig: Research assistant at the University of Bamberg. Her research interests are digital technologies, critical literacy, and education for sustainable development. In her PhD she is investigating the potential of Artificial Intelligence and Virtual Reality with a focus on the development of AI- and VR-assisted tasks, their implementation in classrooms, and teacher and learner perceptions.

Abstract: The combination of artificial intelligence (AI) and virtual reality (VR) provides learners with innovative opportunities for speaking practice in English language education (see, e.g., Gruber, 2023; Huang et al., 2022). Traditional classrooms are frequently faced with limited speaking time, learner anxiety, and restricted authentic speaking scenarios. However, VR in combination with AI can provide a safe and personalized learning environment. Our project explores this potential by developing teacher training and technology-mediated speaking tasks (González-Lloret, 2017). First, we conducted interviews with experts from the field of teacher education to identify the potential and challenges of using AI for speaking in English lessons in Germany and Switzerland. Next, we will develop speaking tasks that incorporate both VR and AI, which teachers will implement in their classrooms. Empirical research is planned during this practical implementation. This moonshot presentation provides a short overview of the project and illustrates practical examples using the software 3Spin to highlight the potential of AI- and VR-assisted speaking tasks.

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González-Lloret, M. (2017). Technology for Task-based Language Teaching. In C. A. Chapelle & S. Sauro (Eds.), *The Handbook of Technology and Second Language Teaching and Learning* (pp. 234–247). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118914069.ch16>

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Guided tour

Follow us through the historic streets of Bamberg and discover stories hidden in its old town, bridges, and winding alleys. We will explore how the city's rich history and culture come alive in its architecture and everyday life. Along the way, you will hear a few surprising insights that connect past and present. We will end our tour at the Domterrassen restaurant, where our conference dinner takes place.

Meeting point: July 2, 6pm in front of the conference building (Luitpoldstraße 19).

Accessibility

The building (Luitpoldstraße 19) is wheelchair accessible. All sessions will take place in room 00.09 on the ground floor. The stairs leading into the building are wide, have low contrast, feature a handrail on the left side, and have a very steep ramp, so wheelchair users will need assistance. Please contact us in advance if you require any assistance.

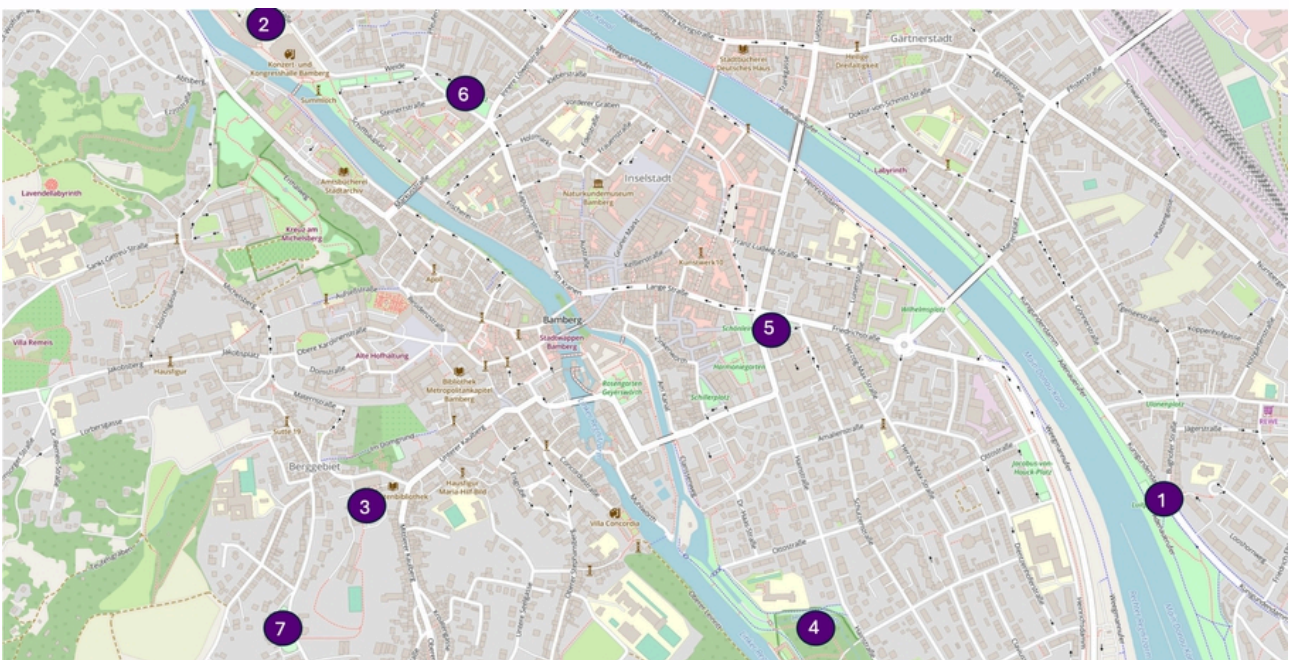
There is an accessible restroom across from the room of the symposium (LU19/00.09).



Childcare

We want to make the symposium family-friendly and offer childcare provided by a student teacher upon request. Please contact us (vr.tefl@uni-bamberg) in advance (latest by 29 June) if you need childcare for some hours during the symposium (subject to availability).

There are two playgrounds within 10 minutes walking distance from our venue: One is "Spielplatz Harmoniegarten" ([Zinkenwörth, 96047 Bamberg](#), no. 5 on the map) located at the center. The other one is located at the riverside "Adenauerufer" ([Kunigundendamm 22-27](#)), which is wheelchair/stroller accessible via a flat access ramp at Kunigundendamm/Luitpoldbrücke. There is a café with public restrooms a 5-minute walk away at the riverside. Below is a city map showing public playgrounds:



(Source: <https://www.openstreetmap.org/#map=13/49.88568/10.86350&layers=V>)



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