WERA International Research Network Annual Progress Report (2025-2026)

Simulation in Teacher Education (SITE)

Official WERA IRN title:

Cultural Competence and Professional Development in Teacher Education through Clinical, Role-Playing, and Mixed Reality Simulations: A Model Based on Universal and Contextualized Skills

This report presents the first-year progress of the WERA IRN Simulation in Teacher Education (SITE). It summarizes the network's activities, scholarly achievements, and collaborative initiatives undertaken between July 2025 and June 2026, and outlines the strategic directions that will guide the network's next phase of development.

Network Leadership

The SITE IRN currently brings together 21 researchers from nine countries representing diverse expertise in simulation-based teacher education. The network is jointly convened by Orna Levin and María Laura Angelini.

Convenors			
1	Orna Levin	Achva Academic College	Israel
2	María Laura Angelini	Catholic University of Valencia	Spain
IRN Members			
3	Agnieszka Lewicka-Zelent	Maria Curie-Skłodowska University in Lublin	Poland
4	Anamaria Marc	Babeș-Bolyai University	Romania

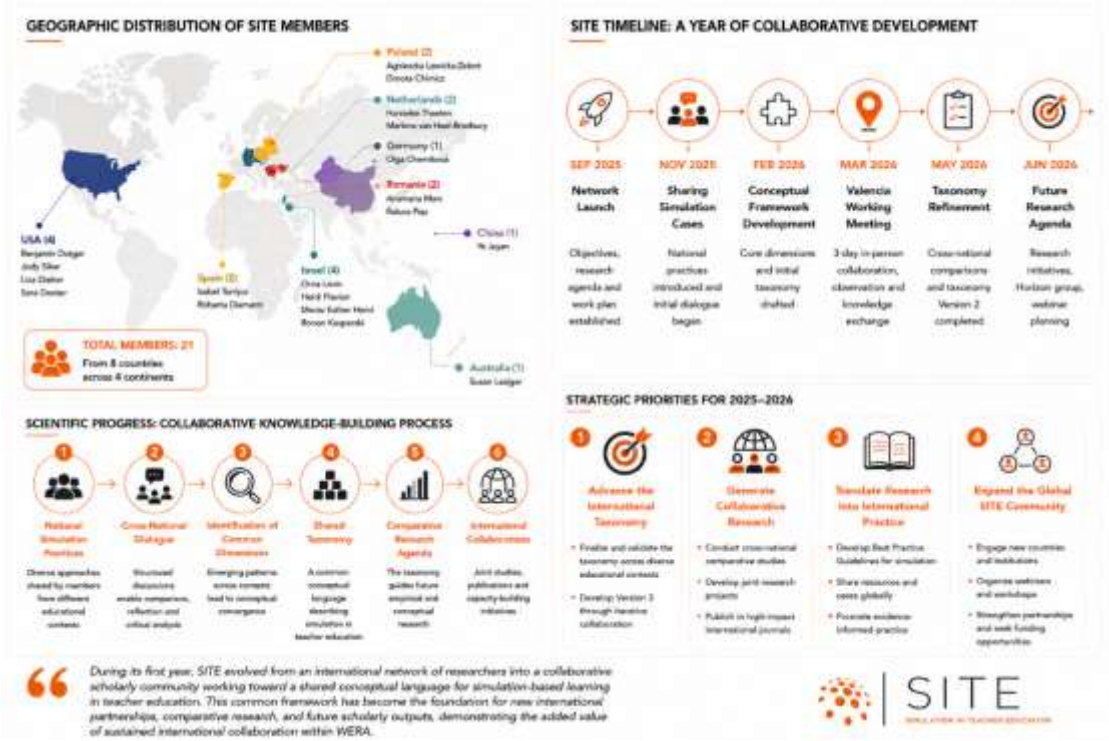
5	Benjamin Dotger	Syracuse University	USA
6	Dorota Chimicz	Maria Curie-Skłodowska University in Lublin	Poland
7	Hanneke Theelen	Zuyd University of Applied Sciences	Netherlands
8	Heidi Flavian	Achva Academic College	Israel
9	Isabel Torrijos	Catholic University of Valencia	Spain
10	Jody Siker	Northeastern Illinois University	USA
12	Lisa Dieker	University of Kansas	USA
13	Marlene van Heel-Bradbury	Zuyd University of Applied Sciences	Netherlands
14	Merav Esther Hemi	Shaanan Academic College	Israel
15	Olga Chernikova	Ludwig-Maximilians-Universität München	Germany
16	Raluca Pop	Babeș-Bolyai University	Romania
17	Roberta Diamanti	Catholic University of Valencia	Spain
18	Ronen Kasperski	Gordon College for Education	Israel
19	Sara Dexter	University of Virginia	USA
20	Susan Ledger	University of Newcastle	Australia
21	Ye Juyan	Beijing Normal University	China

Introduction

The first year of the IRN on Simulation in Teacher Education (SITE) was dedicated to establishing an international scholarly community around a shared research agenda for simulation-based learning in teacher education. Bringing together researchers from diverse educational systems, disciplinary traditions, and simulation approaches, the network sought to address a fundamental challenge in the field: despite the growing use of simulation in teacher education, the absence of a common conceptual language has limited opportunities for cumulative knowledge building, meaningful cross-study comparison, and international collaboration.

Consistent with the original aims of the IRN, particular attention was given to understanding how diverse simulation modalities can support culturally responsive teacher education while balancing universal professional competencies with context-specific educational practices.

Throughout the year, the network progressed from initial dialogue toward sustained collaborative inquiry. Members engaged in a collective process of conceptual development aimed at identifying the core dimensions that characterize simulation-based learning across diverse pedagogical, technological, and cultural contexts. This collaborative effort has laid the foundation for an emerging shared taxonomy of simulation-based learning in teacher education, while simultaneously fostering new international research collaborations and future joint initiatives.



Building an International Research Community

During its first year, SITE established an active and engaged international community of researchers committed to advancing scholarship on simulation-based learning in teacher education.

The network held six online working meetings (September 2025, November 2025, February 2026, May 2026, June 2026, and July 2026), complemented by a three-day face-to-face working meeting hosted by Universidad Católica de Valencia in 18-20 March 2026. While the online meetings supported the continuous development of the network's research agenda, the Valencia meeting represented an important milestone, providing an opportunity for intensive scholarly discussion, collaborative workshops, observation of local simulation practices, and direct engagement with different institutional approaches to simulation-based learning.

Members of the SITE IRN during the three-day working meeting at the Catholic University of Valencia (March 18–20, 2026), combining collaborative workshops, simulation experiences, and strategic planning for future international research

Throughout these meetings, members presented simulation initiatives from their own institutions, examined similarities and differences across national contexts, and reflected collectively on the pedagogical assumptions underlying diverse simulation models. These exchanges enabled members to identify both universal pedagogical principles and context-specific adaptations across different educational systems, directly reflecting one of the network's founding objectives. This ongoing dialogue strengthened the network's capacity to move beyond the description of individual practices toward a shared conceptual understanding of the field.

To enhance communication and visibility beyond formal meetings, the network also established a LinkedIn presence, providing a platform for disseminating activities, strengthening international connections, and engaging with the broader educational research community.

SITE IRN – Simulation in Teacher Education: Overview | LinkedIn

During the reporting period, researchers from additional countries expressed interest in joining the network, reflecting the growing international visibility of the initiative.

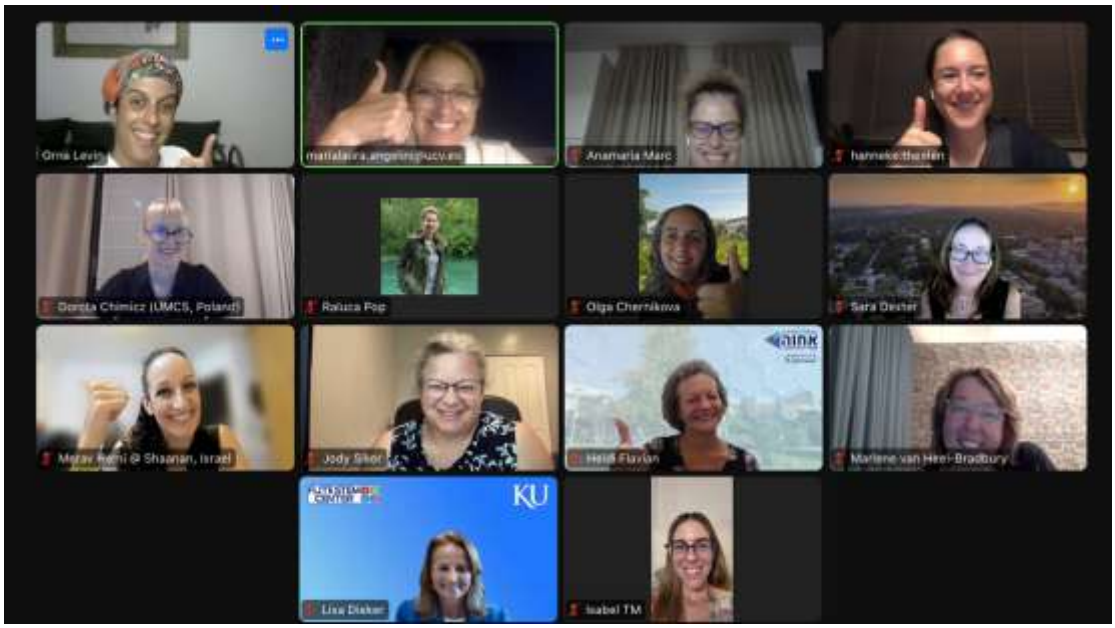
Advancing a Shared Research Agenda

The central scholarly achievement of the network during its first year has been the collaborative development of an emerging taxonomy of simulation-based learning in teacher education. Through an iterative process of collaborative inquiry, members identified conceptual dimensions capable of describing simulation practices across diverse educational systems. Through iterative discussion and comparative analysis, the network examined the purposes of simulation, implementation models, learner engagement, facilitation processes, fidelity, feedback, and intended professional learning outcomes.

The development of the taxonomy has functioned not merely as a classificatory exercise but as a mechanism for collective knowledge building. By negotiating terminology, comparing conceptual assumptions, and examining diverse simulation approaches, members have begun constructing a common scholarly language capable of supporting future comparative research and facilitating communication across previously disconnected research communities.

The collaborative process has also highlighted the importance of acknowledging contextual diversity while identifying conceptual principles that transcend specific technologies or national settings. This balance between conceptual coherence and contextual sensitivity has become one of the defining characteristics of the network's work.

Although the taxonomy is intended to encompass simulation-based learning broadly, the discussions consistently considered how different simulation modalities may contribute to preparing teachers for culturally diverse educational contexts.



Collaborative Working Session

Collaborative Scholarship and Knowledge Exchange

The collaborative work of the network has generated scholarly initiatives extending beyond the regular meetings. Members initiated several international research collaborations and began developing comparative studies involving researchers from multiple countries. These collaborations emerged directly from the conceptual discussions taking place within the network and have strengthened cross-national partnerships that did not previously exist.

The face-to-face meeting in Valencia further expanded opportunities for knowledge exchange through shared observation of simulation activities, discussion of institutional practices, and experiential engagement with local simulation approaches. These activities enriched the comparative dialogue by allowing members to examine simulation not only as a research topic but also as a pedagogical practice situated within different institutional and cultural contexts.

Building on these exchanges, the network has supported collaborative conference activities and initiated planning for future joint publications.

Conferences

- Angelini, M.L; Muñiz, R., & Torrijos, I. (2026) Cultivating Global Citizenship: Teacher Professional Development through Web-based Simulation, *The 14th European Conference on Education (ECE2026) | London,* UK. 9-12 July, 2026
- Angelini, M.L; Muñiz, R., & Torrijos, I. (2026). Global Citizenship through Virtual Exchange Simulation. Unicollaboration Conference *Virtual Exchange in a Changing World: Innovation and Inclusion*. Cyprus 4-6 June, 2026.
- Chimicz, D. (2026) Social-emotional learning (SEL) through crisis-based interdisciplinary simulations. *The 14th European Conference on Education (ECE2026) | London,* UK. 9-12 July, 2026
- Flavian, H. & Levin, O. (2026) Future-oriented reflection in simulation-based learning: A Freirean lens on teacher development across modalities. AERA 2026, Los Angels, California, 9-12 April, 2026
- Kasperski, R. & Hemi, M. (2026) The Theoretical Shift: Grounding SEL in Experiential Learning and Reflective Practice. *The 14th European Conference on Education (ECE2026) | London,* UK. 9-12 July, 2026
- Levin, O., & Angelini, M.L. (2026) Designing for reflection: Metacognitive activation in teacher education simulations. EARLI SIG 4 & 11 Conference 2026, University of Helsinki, Finland, 10-12 June, 2026.
- Levin, O., & Flavian, H. (2026) Invited Keynote: From theory to action: Simulation-based learning as a scalable model for bridging knowledge and practice in teacher education. 2nd Annual International Conference on Innovation and Entrepreneurship in Education, Western Galilee College, Israel, 27 May, 2026.
- Levin, O., & Flavian, H. (2026) The reflective architecture of simulation: How modalities shape reflective learning. EARLI SIG 4 & 11 Conference 2026, University of Helsinki, Finland, 10-12 June, 2026.

- Torrijos, I.; Diamanti, R.; & Angelini, M.L (2025). Managing discomfort, building Professional communication: Simulation-based learning in English for psychology students. *XI Congreso Internacional en Contextos Psicológicos, Educativos y de la Salud*. Madrid. 10/06/2026

Publications

Angelini, M. L. (2026). Unlearning to learn in simulation-based learning. *Learning and Instruction*, Article 102376. https://doi.org/10.1016/j.learninstruc.2026.102376

Angelini, M. L., & Pop, R. (2026). Simulating complexity for praxis and cultivating consciousness: Virtual exchange as a transformative space for teacher education. In *Handbook of using virtual exchange across disciplines: Building global citizens from home*. Emerald.

Angelini, M. L., Javadinejad, A., & Diamanti, R. (2026). The impact of dissonance on simulation experience: A teacher training case study. *Educational Studies*. https://doi.org/10.1080/03055698.2026.2666306

Angelini, M. L., Muñiz, R., & Diamanti, R. (2025). Simulation-based assessment in higher education: Adapting to the era of artificial intelligence. *Journal of Studies in Language, Culture and Society*, *8*(1), 151–161.

Chernikova, O., Stadler, M., Sommerhoff, D., Schons, C., Heitzmann, N., Holzberger, D., Seidel, T., Richters, C., Pickal, A. J., Wecker, C., Nickl, M., Codreanu, E., Ufer, S., Kron, S., Corves, C., Neuhaus, B. J., Fischer, M. R., & Fischer, F. (2025). The relation between learners' experience in simulations and diagnostic accuracy: Generalizability across medical and teacher education. *Computers in Human Behavior Reports*, *15*, Article 100454. https://doi.org/10.1016/j.chbr.2024.100454

De Jong, D., & Dexter, S. (2025). Experiential learning through simulations in fully online asynchronous courses: Exploring the role of self-debriefing. *The*

Internet and Higher Education, *65*, Article 100976. https://doi.org/10.1016/j.iheduc.2024.100976

Diamanti, R., & Angelini, M. L. (2025). Simulation and video feedback as catalysts for linguistic skill development in psychology education. *Frontiers in Education*, *10*, Article 1597291. https://doi.org/10.3389/feduc.2025.1597291

Farwa, U. E., Li, Q., Ye, J., Khan, M. K., & Zulfiqar, S. (2025). Organizational and psychological factors in teacher educators' professional identity development: An empirical analysis. *British Educational Research Journal*, *51*(2), 869–896.

Hemi, M. E. (2025). The differential effect of clinical simulations on the SEL of pre-service, beginner and senior educators. *Journal of Education for Teaching*, *51*(2), 366–380.

Hemi, M. E., Kasperski, R., & Levin, O. (2025). Exploring the role of facilitators in clinical simulations: challenges and practices. *Professional Development in Education*, 1-20. https://doi.org/10.1080/19415257.2025.2536258

Kasperski, R., & Hemi, M. E. (2026). From simulations to practice: The implementation of SEL competencies in teacher education. *Reflective Practice*.

Kasperski, R., Levin, O., & Hemi, M. E. (2025). Scoping review of simulation-based learning for teacher SEL in Israel (2010–2025). *Dapim*, *83*, 1–33.

Kasperski, R., Levin, O., & Hemi, M. E. (2025). Systematic literature review of simulation-based learning for developing teacher SEL. *Education Sciences*, *15*(2), 129. https://doi.org/10.3390/educsci15020129

Ledger, S., Mailizar, Gregory, S., Tanti, M., Gibson, D., & Kruse, S. (2025). Learning to teach with simulation: Historical insights. *Journal of Computers in Education*, *12*(1), 339–366.

Levin, O. (2025). ‘Do not harm’: Dealing with difficulties in teaching through the technology of simulation-based learning. *Technology, Pedagogy and Education*, https://doi.org/10.1080/1475939X.2025.2553582

Levin, O. (2026). Simulation in teacher education: Forming professional identity [Guest editorial, Special Issue]. *Dapim*, *84*.

Levin, O., Assor, A., Yitzhaki, N., Ophir, L., & Hagshoury, T. (2024). 'I Tried to Understand What the Student Really Needs: Using Simulations to Promote a Need-Supporting Dialogical Orientation in Teacher Educators. *The Journal of Experimental Education*, 1-24. https://doi.org/10.1080/00220973.2025

Levin, O., Frei-Landau, R., & Goldberg, C. (2025). " No pain, no gain": Simulation-based learning in teacher education: The mediating role of simulation hindrances. *PloS one*, *20*(1), e0317255. https://doi.org/10.1371/journal.pone.0317255

Levin, O., Frei-Landau, R., Flavian, H., & Miller, E. C. (2025). Creating authenticity in simulation-based learning scenarios in teacher education. *European Journal of Teacher Education*, *48*(2), 291–312. https://doi.org/10.1080/02619768.2023.2175664

Levin, O., Hemi, M. E., & Kasperski, R. (2025). Multiple aspects of simulation facilitators' role in higher education: Protecting and challenging the learners. *Teaching in Higher Education*, *30*(1), 225-239. https://doi.org/10.1080/13562517.2023.2251894

Theelen, H., & Dirkx, K. (2025). Blended education in practice: Understanding the gap between instructional design knowledge and digital learning integration. [Manuscript in press].

Theelen, H., & van Breukelen, D. H. J. (2025). What's going on? A systematic literature review of the causes and consequences of teacher shortages. *The Journal of Education Insights*, *3*(4).

Theelen, H., Canisius, E., & Lambert, G. (2025). The relationship between instructional strategies and cognitive activation in higher education: A student perspective. *Active Learning in Higher Education*, *26*(3), 521–541.

van Breukelen, D. H. J., & Theelen, H. (2026). Teacher shortages in developed countries: A systematic literature review of measures and their effectiveness. [Manuscript submitted for publication].

In parallel, a Horizon Europe application is currently underway, bringing together all SITE members through close-knit collaboration with the IGALA research group. This joint proposal reflects the network's growing research capacity and long-term collaborative ambitions, and represents a significant step toward securing international funding for comparative research on simulation-based learning in teacher education.

Emerging Impact and International Visibility

Beyond its immediate research activities, the network has contributed to strengthening the international visibility of simulation-based learning in teacher education as an emerging field of educational research. The network has initiated discussions with WERA regarding a proposed webinar dedicated to simulation in teacher education. The proposed webinar is intended to introduce the network's emerging conceptual work to the wider WERA community while encouraging dialogue among researchers and practitioners. The webinar is expected not only to disseminate the emerging taxonomy but also to create opportunities for broader international participation and future collaborative initiatives.

Interest from researchers outside the current membership, together with the network's growing international visibility through its online presence and conference participation, suggests increasing recognition of the need for an international forum dedicated specifically to simulation research in teacher education.

Future Directions

Building on the conceptual framework and international partnerships established during its first year, the network has identified the following strategic priorities for the coming year.

From a research perspective, members will continue refining the shared taxonomy through collaborative review and empirical validation across different national contexts. This work will serve as the foundation for a series of comparative studies examining how simulation is conceptualized, implemented, and experienced across teacher education systems worldwide.

The network also intends to develop an international set of Best Practice Guidelines for simulation-based learning in teacher education, synthesizing the collective expertise of its members while remaining sensitive to contextual diversity. In parallel, planning has begun for an edited international volume showcasing diverse simulation approaches through the conceptual framework developed by the network.

To strengthen international collaboration, the network will continue developing joint research projects, pursue external funding opportunities including Horizon Europe, expand its international membership, and organize scholarly events that promote dialogue between researchers and practitioners. The planned WERA webinar will represent an important step toward disseminating the network's work and inviting broader international engagement with the emerging research agenda.

Concluding Remarks

The first year of the SITE network has demonstrated the value of sustained international collaboration in addressing complex conceptual and methodological challenges within educational research. Rather than simply connecting researchers working on similar topics, the network has fostered a collaborative process of collective sense-making through which diverse simulation traditions have informed the development of a shared conceptual framework.

By combining conceptual inquiry, comparative dialogue, and emerging collaborative research, SITE has established the foundations of an international scholarly community positioned to advance both the theory and practice of simulation-based learning in teacher education. As the network enters its second year, it is well positioned to advance international scholarship through comparative research, shared conceptual development, and sustained collaboration across educational systems.