What Makes Simulation-Based Learning Meaningful in Teacher Education?

Handout for IUT 2026 Poster Session

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Key message: A meaningful simulation is not only a technical activity. It is a pedagogical ecosystem that supports autonomy, competence, and relatedness - helping pre-service teachers move from acting a role to becoming a teacher.

Study at a glance

Research question	What core elements of a simulation generate a meaningful experience for participants?
Context	ADAM Simulation Center, Kaye Academic College of Education; actor-based educational simulations followed by structured reflective debriefing.
Method	Qualitative phenomenological study; 15 in-depth semi-structured interviews with pre-service teachers who participated as active players or observers.
Participants	15 female pre-service teachers: 8 Bedouin-Arab and 7 Jewish students; second and third year of training.

Five core elements of a meaningful simulation

Element	Why it matters	Design implication
1. Pre-simulation preparation	Reduces anxiety and builds a sense of competence by replacing uncertainty with clarity.	Brief participants about aims, structure, roles, observation, recording, and the learning purpose.
2. Relevance and authenticity	Connects the scenario to participants' future professional reality and bridges theory and practice.	Use real dilemmas from teaching: parent meetings, classroom management, principal meetings, student needs.
3. In-depth debriefing	Transforms raw experience into professional concepts, language, and transferable learning.	Name concrete behaviors, alternatives, strengths, emotions, and professional principles.
4. Autonomy and role clarity	Allows participants to act from their emerging professional identity rather than perform for evaluation.	Clarify that participants may respond as themselves as future teachers; reduce controlling pressure.
5. Moderator as safety net	Creates psychological safety, protects competence, and models constructive professional dialogue.	Normalize mistakes, balance feedback, include all voices, and connect the scenario to real practice.

Practical takeaways for teacher educators

- Treat preparation and debriefing as central learning phases, not as technical additions.
- Design simulations that are emotionally safe but professionally authentic and challenging.
- Use debriefing to translate feelings and actions into explicit professional knowledge.
- Support autonomy through role clarity, choice, and a non-judgmental learning climate.
- Invest in facilitator training: the moderator is a key pedagogical mediator of meaning.

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