

Simulation-Based

# Learning Environments

A Training Tool for Teacher Candidates



TOURO COLLEGE  
GRADUATE SCHOOL  
OF EDUCATION

**Jasmin Cowin, Ed.D.**

Assistant Professor and Practicum Coordinator  
Touro College, Graduate School of Education  
New York, NY

[drccowinj-locationindependentteach.com](mailto:drccowinj-locationindependentteach.com)

1



## Simulation-based learning (SBL)

replicates aspects of the real world in an interactive manner that allows learners to be immersed in real-time within the learning environment.

2

## Artificial Emotional Intelligence (AEI)

deals with measuring human emotion, understanding stimuli, and giving back an appropriate response based on the situation and desired training outcomes and responses. Student avatars can be based on the **Ortony, Clore, and Collins Model (OCC Model)**



3



## Epistemic Game Theory (EGT)

is the formal analysis of players' interactive strategic reasoning in games or simulated learning environments.

4



## Educational Scenarios

or learning scenarios is an instructional design model for a given subject and a given kind of situation. It defines what learners and other actors such as the teacher candidate should/can/shouldn't do with a given set of resources, tools and emotional challenges.

5



## Guided Concept Pathways

different scenarios depending on the teaching intervention branch out relation to academic, cognitive, and socioemotional success, as well as use-related variables and responses of the AEI directed student avatar.

6



## Instructional Activities

small, routine segments of instruction that specify how teachers and students will participate and how they will interact with materials and content such as reading, writing, listening and speaking mathematics, and desired behaviors.

7



## Adaptive Student Progression

or adaptive learning requires adaptive teaching which is based on delivery of custom learning experiences that address the unique needs of an individual through just-in-time feedback, pathways, and resources.