

1

User-Defined Environment

Sector
Object
Arena
Item



2

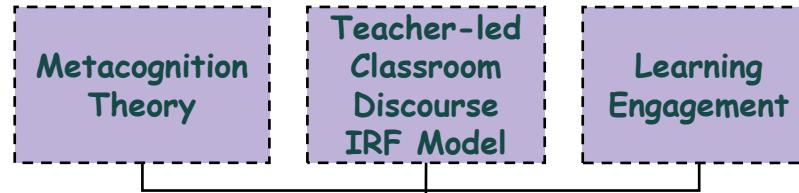
CIE-based Agent Modeling



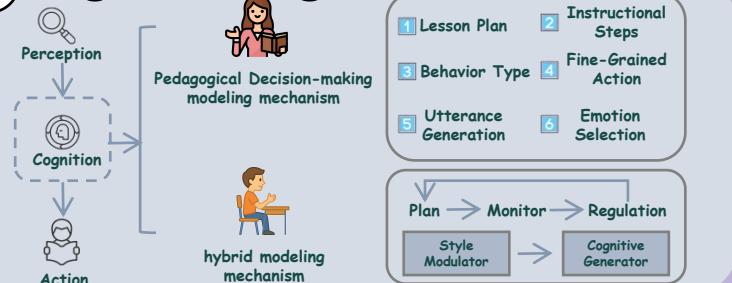
Behavior: Questioning
Emotion: Encouragement
Content: How Mr. Zhu vividly portrayed the beauty of spring through delicate descriptions?
Feedback: Liu Li, great improvement—keep up your active participation.



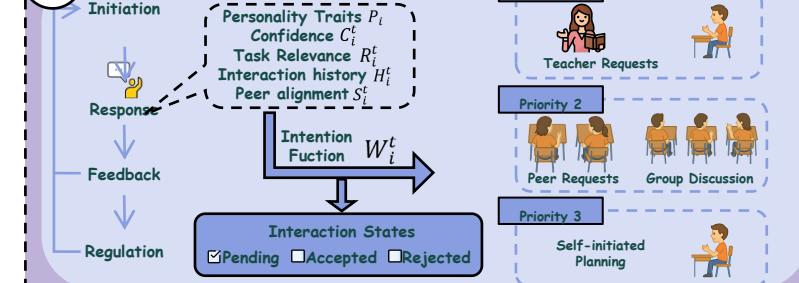
Age: 13
Gender: Female
Personality: High Neuroticism
Class Role: Academic Student
Learning Motivation: High
Class Behavior: Often hesitant but gradually contributes well-structured summaries and personal reflections during class.
Cognitive Style: Field-dependent
Thinking Tendency: Reflective



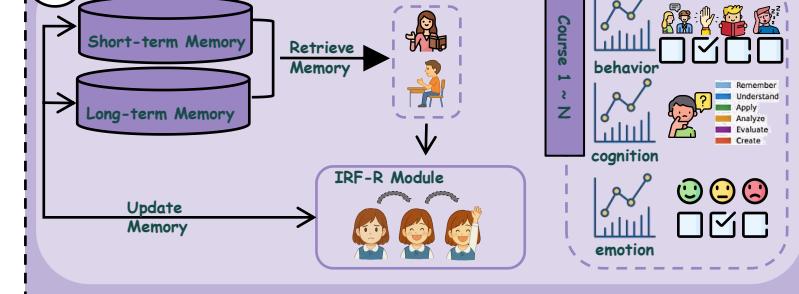
a Cognition Engine



b Interaction Core



c Evolution Layer



3

Interaction and Evolution Experiments

I believe Mr. Zhu's descriptions truly immerse us in the atmosphere of spring. The use of personification and metaphor makes the imagery come alive.

Teacher: How Mr. Zhu vividly portrayed the beauty of spring through delicate descriptions?

Ugh, don't overthink it. It's not a big deal anyway.



Experiment I: Cognition-Driven Instructional Alignment

Experiment II: Group Interaction Analysis and Role Differentiation

Experiment III: Cross-Session Evolution and Long-term Development