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## Decoupling assessment and serious games to support guided exploratory learning in smart education

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**Abstract:** This research proposes an enhanced approach of decoupling assessment and serious games to support fire evacuation training in smart education. The proposed assessment approach employs an evidence-based dynamic assessment and feedback to guide players through school's building evacuation. Experimentation results show the applicability of the proposed assessment approach in enhancing fire evacuation training using serious games. Moreover, students were engaged to the proposed learning scenarios and their overall fire evacuation assessment were enhanced using the guided exploratory game-based training.