Learning Concrete Formwork Using 3D Simulation Game

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Introduction & Background

Concrete Formwork Teaching Challenges

- Technology Savvy students
- Visualization
- Site Visits
- Online

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Aim, Objectives, and Scope

Develop 3D concrete formwork simulation game.

- The game helps to understand design assumptions and to learn about the slab, wall and column formwork components.
- Visual rich
- Ubiquitous

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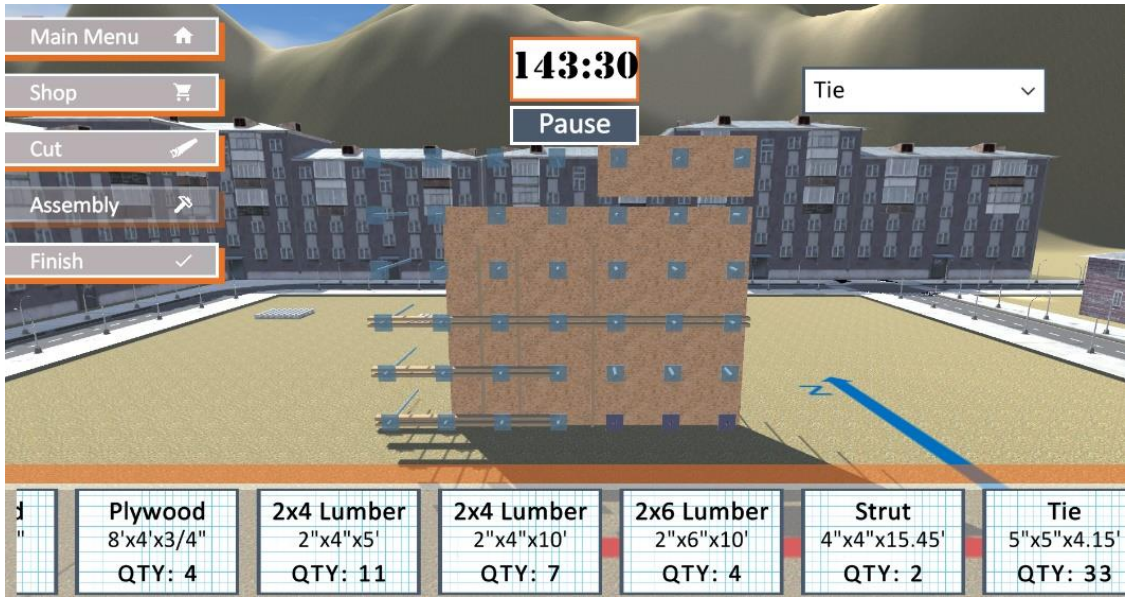
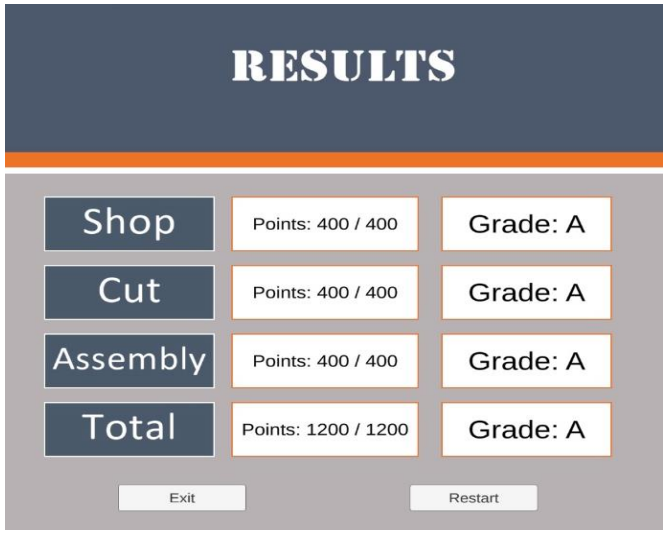
Research Design and Methodology

Develop 3D concrete formwork simulation game.





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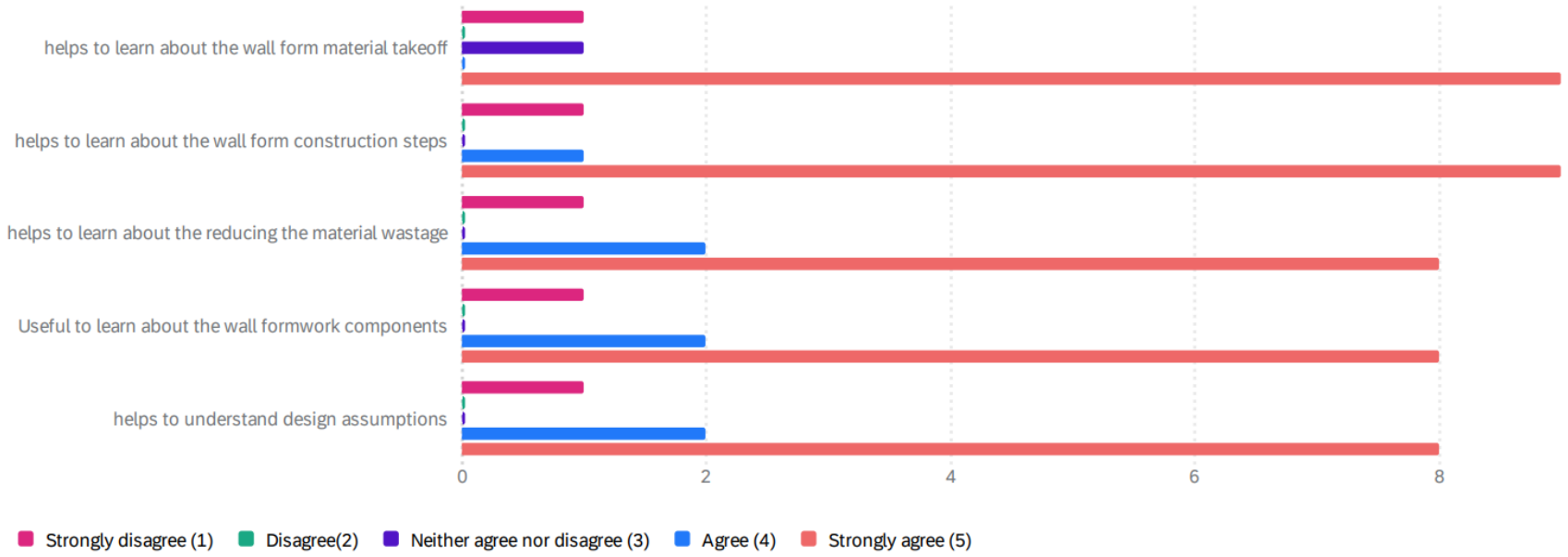
Results



Usefulness of simulation game survey results

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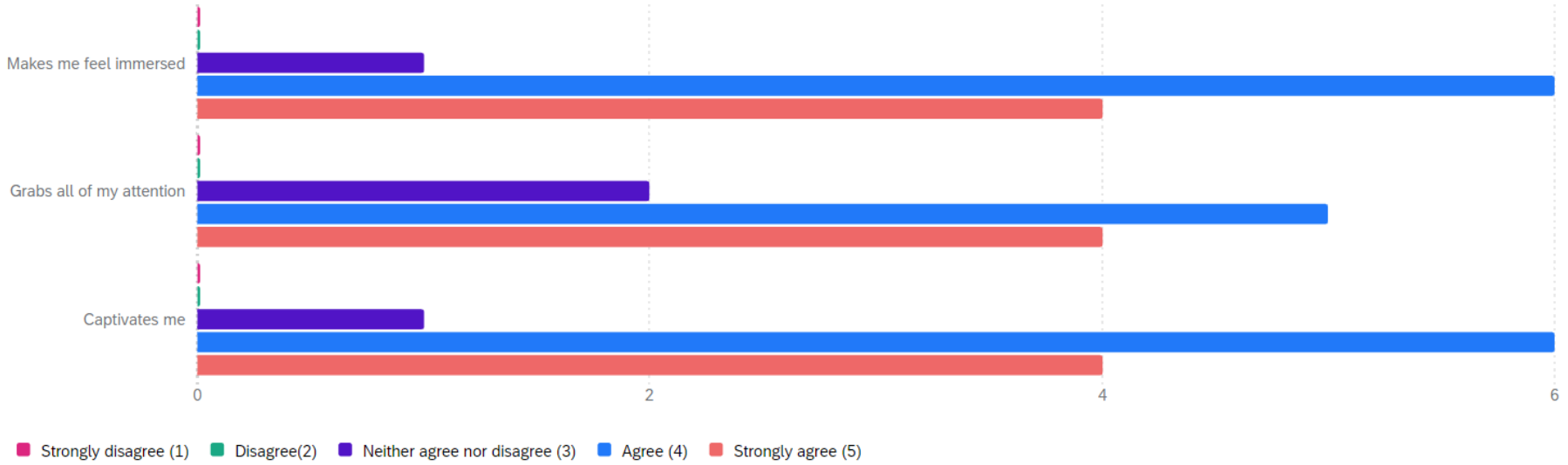
Results



Immersion provided by the simulation game survey results

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Discussions, Conclusions & Recommendations

- The 3D simulation game environment has the potential to make a paradigm shift in teaching and learning process of concrete formwork.