



HOW CAN GAMING BE A LEARNING TOOL IN URBAN PUBLIC PARTICIPATION PROCESSES?

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ABSTRACT

The urban planning and design participation process has limitations concerning public consultation, with its lack of engagement and communication barriers, leaving few involved. This research constructs a framework to help uncover and test elements needed in urban participation to engage people through immersive gamification by employing several principles, such as visualisation and problem-solving.

Gaming is a valuable tool by increasing public awareness, feedback, and co-creation with its manipulability "by providing clear roles, actions, and tasks, structuring the collaboration process, and providing room for deliberation" (Sarah et al., 2022). In addition, the target groups are non-professionals to test the accessibility of urban design/planning information, disregarding the need for previous knowledge or engagement with urban design/planning.

AIM

Identify the elements of gaming that can be used in urban design to improve education and the richness of engagement.

OBJECTIVES

1. Understand how games can be used as an urban tool.
2. Develop an analytical framework for successful participation.
3. Utilise the analytical framework with an existing virtual and non-virtual urban tool game.
4. Collect data on how accessible and engageable an urban game is with non-professionals by hosting a game activity.

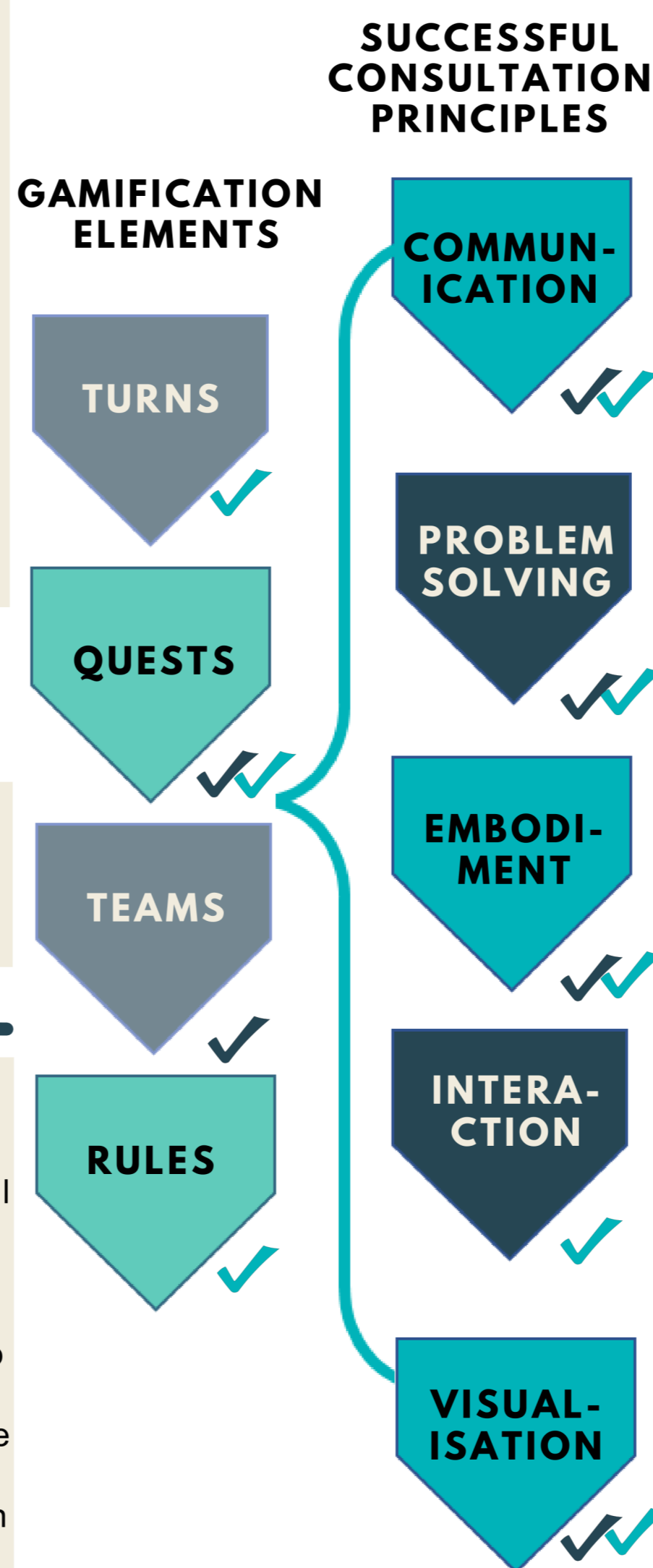
METHODOLOGY

1. Review secondary research addressing the relationship between urban design and games.
2. Use the framework created by the literature review for case studies and observation.
3. Primary research via observation and secondary research on a case study focusing on using an urban game.
4. Quantitative data from Likert surveying.

DATA ANALYSIS

Visual analysis, case study matrix, descriptive statistic

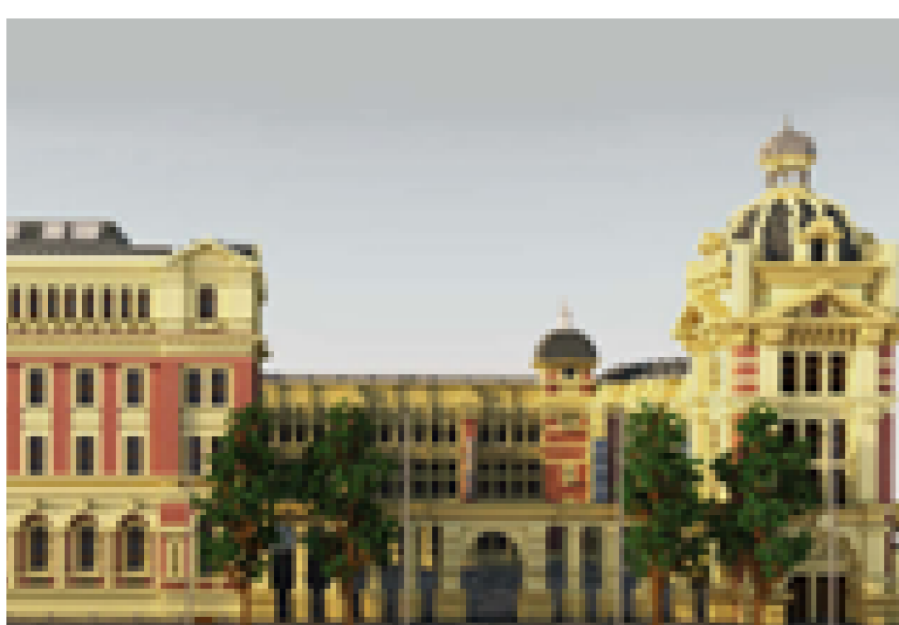
FRAMEWORK



RESULTS

VIRTUAL ✓

1. Secondary research case study (Blockworks London Exhibition centre)



Blockworks virtual workshop(Blockworks, 2017)

Secondary research results

1. Created visually rich educational consultations using the virtual 3D platform.
2. Needs enough laptops and access to Minecraft to work.
3. Having no rules allowed participants to have creative freedom.
4. To improve, the workshop could include VR to richen immersive embodiment.
5. To improve, there could be the addition of teamwork interaction promoting negotiation and interaction.

This game platform allowed participants (younger people) to contribute their designs through play in a 3D world that is safe for experimenting with low-cost failure.

Observation and survey results

1. Created reflection on the methods/tool opportunities for urban public participation.
2. Created a learning opportunity for space planning, flexibility, and design through communication with simple visualisation as urban information.
3. Fun and competitive
4. To improve, participants recommended more cards and definitions to add more depth and make the game easier to play.

This game platform allows participants in an active way to understand the physical and social tools that make up urban analysis through a competitive card game.

CONCLUSION

★ URBAN GAMING

Adding more simplicity and entertainment to the process will encourage diverse participants to participate in urban processes, which will help create a more inclusive urban future.



REFERENCES

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