Paper Title: Assessing the Extent to Which Players Can Build Sustainable Cities in the Digital City-Builder Game “Cities: Skylines”

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1.Summary

1.1 Motivation/Purpose/Aims/Hypothesis
The research paper on "Cities: Skylines and Sustainable Urban Development" aims to explore the possibilities and limitations of using the city-building simulation game "Cities: Skylines" (C:S) as an educational tool for understanding sustainable urban development. The motivation behind the study lies in the increasing relevance of digital games in education and the need for innovative approaches to teaching complex topics like urban geography and sustainability.

1.2 Contribution
The paper contributes by providing a detailed analysis of C:S across five dimensions: land management, environment, mobility, social, and economy. It identifies the scientific criteria and indicators of sustainable city development within the game, highlighting both its potential and shortcomings. The contribution extends to proposing ways in which C:S can be integrated into geography classrooms to enhance learning outcomes.

1.3 Methodology
The methodology involves a thorough examination of C:S gameplay, dissecting its representation of sustainable urban development. The analysis is structured around key dimensions, offering insights into how the game aligns with or diverges from established sustainability goals. The approach includes discussions on educational implications and potential shortcomings, providing a comprehensive understanding of the game's applicability in a learning context.

1.4 Conclusion
The conclusion emphasizes the educational potential of C:S in teaching sustainable city development while acknowledging its limitations. It suggests strategies for teachers to use the game's shortcomings as prompts for classroom discussions and reflections. The section also anticipates the evolution of C:S and its sequel, "Cities: Skylines 2," underlining the ongoing relevance and importance of the research.

2. Limitations

2.1 First Limitation/Critique
One notable limitation of C:S is the lack of significant in-game feedback for sustainability. The game's emphasis on economic growth over sustainability raises concerns about its representation of real-world urban planning challenges. This limitation poses challenges for educators aiming to use C:S as a tool for teaching the balanced and multifaceted nature of sustainable city development.

2.2 Second Limitation/Critique

Another limitation highlighted in the paper is the game's portrayal of city management with autocratic power, neglecting the democratic decision-making processes inherent in sustainable urban development. The absence of democratic institutions in the gameplay raises questions about the realism and completeness of the educational experience provided by C:S.

3. Synthesis

The ideas presented in the paper open avenues for potential applications and future research. The educational implications suggest a practical use of C:S in geography classrooms, leveraging its strengths while addressing its limitations through thoughtful discussions. The synthesis proposes further research into maximizing the meaningful learning experience using C:S, balancing sustainability goals with engaging game mechanics, and understanding the real-world implications of players' decisions. The impending release of "Cities: Skylines 2" presents an exciting opportunity for continued exploration and refinement of the game's educational potential. The synthesis calls for ongoing investigation into the evolving landscape of digital games in education, particularly in the context of sustainable urban development.