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Game Play Meets Governance: Roblox in Urban Planning

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Abstract

Millions of young people are using mobile gaming platforms, and roblox is a big part of what makes it possible for them to have fun and learn at the same time. Roblox is a proven useful tool for teaching and learning in both peer-to-peer and participatory settings. It can be used through Roblox Studio in a multiuser collaboration model, which lets users work together to make interactive 3D models and environments using built-in tools to make roads, buildings, and hospitals.

This chapter will help you understand the platform's easy-to-use interface that will help you learn basic design principles, spatial reasoning, and civic responsibility. The study focusses on using Roblox Studio to create a mirrored real-world city planning in which many people work together to create a shared vision of their urban environment. This study will utilise a specific dataset comprising a group of users from an institution. Initially, the participants will create an outline city plan, which will serve as a basis for exploring their perceptions of an ideal city. Subsequently, they will receive training in city landscape planning using Roblox Studio.

The primary objective of this study is to elucidate the utilisation of Roblox as a mechanism to engage stakeholder participation in the active process of urban planning, wherein they can be directed through the procedures and concepts of sustainability and accessibility. This study will elucidate the utilisation of game platforms as educational mediums, allowing participants to explore their perceptions of ideal cities through Roblox. With the accessibility of tools such as Roblox Studio, aspiring users can create their own concepts of ideal cities.

Introduction

Mobile gaming platforms are becoming increasingly popular, changing the way people learn and have fun online. Young people are using these platforms to talk to each other and play games in interactive environments that let them connect and learn at the same time. Roblox is a very popular platform because it is both a social gaming hub and an easy-to-use game-making engine. Roblox is different from most games that offer pre-made experiences because it lets users create, communicate, and explore their own virtual designs through Roblox Studio. This development software combines easy-to-use drag-and-drop interfaces with basic programming using its Luau scripting language, which makes it much easier for younger people to learn digital design, coding, and environment modelling (Wikipedia, 2025). This has made Roblox Studio appealing in educational settings, where its tools facilitate participatory, peer-to-peer learning models and collaborative, project-based engagement. Several studies have emphasised the educational significance of Roblox, with researchers observing its efficacy in fostering creativity, collaboration, and problem-solving abilities, alongside its contribution to foundational primary education, interactive learning environments, and game-based pedagogy (Alkhaldi et al., 2023; Omar et al., 2024). The platform is very popular, with more than 200 million monthly active users around the world. This means that students are already familiar with how it works, which is a great chance for teachers or faculty to use an existing technology ecosystem as a way to teach. Roblox Studio is a great tool for people who need to use spatial reasoning and creative visualisation because it lets them work together to design any virtual environment, like buildings, roads, hospitals, and whole cityscapes. In this case, urban planning education is a very user-friendly area for Roblox's studio. Planning a city, on the other hand, requires not only technical knowledge of design and environment principles but also social awareness, civic responsibility, and the ability to communicate for the interests of different stakeholders. Traditional urban planning education has frequently relied on static models, paper-based exercises, or advanced CAD software that poses challenges for novices, particularly younger students. By differentiating, this Roblox studio offers a gamified, interactive, and collaborative setting where learners can actively engage with urban planning concepts through live experiences, testing ideas, constructing virtual prototypes, and obtaining immediate feedback via team interaction. Recent studies have started to investigate this intersection, indicating that software such as Roblox can serve as instruments for participatory smart city planning, enabling children and youth to express their visions of ideal urban environments

within a playful and accessible context (Kim et al., 2024). This creates exciting opportunities not just for education, but also for a participatory approach to making city government more democratic. One of the hardest parts of city planning is finding ways to get future citizens involved in the decision-making process in a meaningful way. Many regular people can't take part in traditional planning talks because they don't know enough about the subject, can't get to those kinds of meetings, or don't care about how the government works. Using a platform that people are already familiar with and enjoy, like Roblox, can help lower these barriers and make it easier for everyone to join in. Additionally, exposing younger generations to ideas like sustainability, accessibility, and infrastructure design through fun simulations that instill a sense of civic duty and environmental awareness at an early age will help shape more responsible citizens in the future. This study utilises Roblox Studio not merely as a gaming tool, but as a platform for educational and participatory methodologies, enabling learners to collaboratively design mirrored urban environments, thereby transforming abstract civic concepts into tangible, interactive models. The current study will engage institutional participants who will initially be required to articulate their perceptions of an ideal city, as well as to disclose their values, priorities, and expectations concerning urban life. After that, they will get organised training in Roblox Studio and work together to make a city model that everyone can use. This will let us look at how their design choices affect their final constructions and include the ideas of sustainability, inclusiveness, and community well-being. This approach is important because it combines constructivist learning theory, which says that knowledge is built through hands-on experience, participatory design theory, which says that users should be directly involved in the design process, and game-based learning theory, which says that games can be used for education and learning because they are fun and help people learn. The study underscores Roblox Studio as an intersection of learning, creativity, and civic engagement through the incorporation of these theoretical frameworks. Research has demonstrated that Roblox facilitates constructive and collaborative practices by enabling learners to co-create environments and experiment with ideas in real time (Razali et al., 2023). Game-based learning research shows that gamified settings boost motivation, engagement, and higher-order thinking skills by getting students to play, try again, and solve problems (Gee, 2007). Simultaneously, participatory design research emphasises the significance of engaging stakeholders in co-creation, aligning it with the multi-user collaboration model of Roblox Studio, where participants from various age groups can concurrently collaborate on the same digital design project. From this viewpoint, this study not only addresses a deficiency in current Roblox research, predominantly centred on STEM and creative design applications, but also contributes to broader dialogues regarding the role of digital platforms in facilitating civic education and urban engagement. This research's recommendations have implications for both theoretical and practical realms: on an academic level, it broadens the field of game-based learning studies by highlighting its applicability to urban planning; on a practical level, it provides educators and policymakers with a replicable framework that engages youth and community members in dialogues concerning sustainable urban futures. This is clearly in the context of global problems like climate change, rapid urbanisation, and social inequality, which call for new and creative ways to get people involved in governance and public life. This study posits that implementing urban planning within a gamified and collaborative framework enhances participants' comprehension of abstract concepts such as zoning, accessibility, and sustainability, while simultaneously empowering them to perceive themselves as active contributors to the development of their cities. Finally, the research suggests that Roblox Studio can serve as a conduit between entertainment and education, play and policy, individual creativity and collective civic responsibility, rendering it an essential instrument in re-evaluating both our pedagogical approaches and our methods of engaging stakeholders in envisioning more inclusive and sustainable urban environments.

Review of the Literature

The intersection of traditional knowledge, design, and strategic planning has garnered academic attention as digital platforms serve as informative and communal tools. Roblox stands out as particularly advantageous due to its dual role as both an entertainment venue and a unique development platform. Scientists have extensively recognised Roblox’s potential for education, particularly in fostering dynamic, social, and collaborative learning experiences. Numerous lessons have highlighted its value in enhancing collective skills, promoting STEM education, and encouraging problem-solving, while addressing issues such as cybersecurity, digital safety, and the necessity for structured instructional and educational integration (Alkhaldi, AlFayyadh, & Alabdulkareem, 2023; Omar, Gani, & Razak, 2024). Roblox Studio gives users the tools they need to create 3D environments where people can work together. As a key tool, it lets users take part in real-life activities where they can work with groups to build and break down their plans, making an intellectual fact compact and easy to get to. This is in line with Gee's (2007) first work on video games and education, which questions

the ethics of real education by having its students make thoughtful plans through hands-on, practical engagement. Roblox turns this educational view into a civic one by letting its workers work together to create urban settings that promote values like sustainability, comprehensiveness, and user-friendliness. This combines fun collaboration with civic ideas. Innovative lessons have begun to place Roblox in the context of participatory urban planning, showing how younger people can help shape cities through gamified design workshops. For example, Kim, Lee, and Park (2024) said that Roblox Studio could be a fun way to develop smart cities, where kids and young people could create their own visions of ideal cities, design public spaces, and think about what infrastructure is needed to do traditional planning. For example, these same programs were used at the Universitas Indonesia vocational seminar, where basic school students worked in teams to design city layouts in Roblox. The goal was to encourage early community awareness while also sparking creativity and three-dimensional thinking, especially by getting young beginners to think about how to balance things like public services, green spaces, and social infrastructure in their urban designs (Universitas Indonesia, 2022). These events support the idea that urban planning education can benefit from accessible, game-based simulations, as they can reduce technical issues and encourage participation, particularly in relation to specialised CAD tools that require specific training. This allows for the development of ideas about sharing design, which says that investors should be directly involved in shaping structures that bother them. This makes Roblox a great place to test participatory methods in digital and educational settings (Wikipedia, 2025b). In working out, participatory design tactics through Roblox patent in multi-user teamwork, where beginners not only projects 3D virtual settings but also workout on decisions made by mediating conflicts, and integrating different viewpoints, developments that goes with real-world urban governance trials. Researchers have further investigated the relevance of thoughtful games in urban planning, with Sandor, Bogdanovych, and Ratanamahatana (2012) elucidating how playful digital environments can enhance public engagement, rendering complex policy discussions more collaborative and informative for non-expert audiences. Their research findings regarding an online serious game elucidated the gaming contexts that emphasise motivation and engagement in planning processes, while also drawing significant parallels with a Roblox-based application system where urban design facilitates collaboration and repetitive actions. This comprehensive study on serious games and planning examines the implementation of gamified strategies for education and community engagement, while also highlighting performance as a means of empowerment and dialogue rather than mere entertainment. In addition to civic and educational worker cases, the study has also focused on the role of Roblox in specific subject-based learning, enhancing its adaptability as an educational tool. Razali, Sulaiman, and Kadir (2023), for instance, demonstrated how Roblox Studio could be utilised to create Edu-Fertiblox, a digital educational resource designed to replicate fertigation structures in agriculture for younger learners, by exploring the game's usability and emphasising its interactivity while also integrating its technical concepts. This study demonstrates that Roblox transcends mere role-playing and can be employed in diverse corrective contexts, reinforcing the argument for its integration into urban planning pedagogy, where complex and abstract concepts can be rendered more concrete through collaborative design. Roblox Corporation has made organisational changes to support all this hard work. For example, they have created a Learning Hub with courses-aligned experiences like "Planet Planners" from BBC Bitesize, which are meant to teach subjects from geography to city planning (Roblox Corporation, 2025). These programs give the company the right to make Roblox's educational role normal, which makes it okay for the company to design civic and pedagogical contexts. These inclinations suggest that Roblox is not just a fun place to play games, but also a place where people can be creative and take part in civic duties. But this expectation must be balanced with the challenges recognised in the literature, particularly regarding security and digital risks. Omar, Gani, and Razak (2024) assert that while Roblox offers clearly defined educational opportunities, its exposure to and integration with environmental systems exposes learners to challenges such as cyberbullying, privacy infringements, and inappropriate content. Therefore, robust protections and teacher supervision are essential to ensure the attainment of educational objectives. These problems show that when using Roblox for education or group planning, you need to think about instructional design and official support. They also show that creativity and teamwork are important for keeping the digital environment safe. The study on participatory learning atmospheres has emphasised the necessity of balancing autonomy with support, enabling learners to engage through organisational activities, reflective dialogue, and clear educational objectives (Gee, 2007; Alkhaldi et al., 2023). This stability is important for teaching kids about urban planning, where they need to move from things like visual appeal to things like sustainability, fairness, and how well things work. Scientists have noted that youth-oriented city designs in Roblox demonstrated creativity in basic interpretations of urban living, incorporating parks and recreation while occasionally neglecting infrastructural or environmental issues (Kim et al., 2024). These results highlight the importance of planned facilitation in various workshops, where educators or organisers present essential concepts related to zoning,

transportation systems, waste management, and environmental sustainability, enabling participants to enhance their understanding while safeguarding their creative rights. A study on sustainable knowledge games underscores the potential of Roblox-like systems to engage learners with significant global challenges. For instance, the Asian Development Bank featured “Sky Farm Island,” a Roblox-based sustainability game designed to educate youth about vertical farming and environmentally sustainable urban agriculture, successfully engaging players with ecological concepts in an entertaining and informative manner (Asian Development Bank, 2022). These events collectively underscored the growing awareness of platforms where Roblox can be utilised not only for creativity but also for entertainment, promoting civic responsibility, environmental awareness, and skills essential for participatory governance. This aligns with similar evidence in the broader educational literature regarding active learning, where researchers assert that experiential, game-oriented activities enhance critical thinking, problem-solving, and collaboration compared to traditional instructional methods (Lincoln Institute of Land Policy, 2021). Roblox appears to be well-suited for individuals by integrating the principles of constructivist learning, participatory design, and game-based education into a cohesive platform that is already widely adopted by youth, indicating that Roblox supports formal education alongside informal play. Roblox is different from other educational games that have trouble getting people to use them because it is scalable and already has a large user base. People already use Roblox for social purposes. This makes unstable learning environments easier to deal with than personalised tools that aren't used as much. Lessons indicate that Roblox Studio and its collaborative frameworks present innovative pathways for education and civic participation, particularly in urban planning (Razali et al., 2023; Alkhaldi et al., 2023). Indications suggest its efficacy in STEM education and its potential to support participatory governance frameworks (Kim et al., 2024; Sandor et al., 2012). Official support for structured programs (Roblox Corporation, 2025) also emphasises the importance of fostering creativity and civic imagination. But researchers also talk about problems. Without the right safety measures and supervision, issues like digital risks (Omar et al., 2024) or shallow project designs (Kim et al., 2024) made it harder for the project to work well. Roblox could still make urban planning education more accessible if it were based on constructivist theory, participatory design principles, and game-based learning strategies. It lets different groups talk about building cities, which is usually something experts do. In short, the stage is no longer just for entertainment; it's also a place for people to talk and learn about how to build cities that are good for the environment. Piaget's ideas about hands-on experimentation and Vygotsky's ideas about social interaction both help us understand why Roblox is so popular (Gee, 2007; Alkhaldi et al., 2023). The stage lets people who are new to digital objects play with them while working together in shared spaces. This shows how hard it is to plan cities in real life: designing iteratively, balancing different interests, and turning abstract ideas into real layouts. For a long time, participatory urbanism research has said that bringing together different voices leads to better designs and more support from the community (Wikipedia, 2025b). Roblox makes things easier by replacing complicated software with simple drag-and-drop tools that anyone can use. Take (Kim et al., 2024; Sandor et al., 2012). work on serious games (2012). They made the rules easier to understand and more fun to follow so that more people could take part in technical processes. Roblox does something similar: it turns city planning into a collaborative sandbox where even kids or people who aren't experts can build virtual cities. Research on public education supports this method as well. Experiential learning, which involves practicing decision-making in simulations, is more effective than textbooks for retaining information (Lincoln Institute of Land Policy, 2021). These actions go beyond play when they are done right. Kim et al.'s study (2024) showed kids designing Roblox cities and then ordering parks and green energy after some instruction. Similar designs fell apart in sustainability games like "Sky Farm Island," where environmental lessons stuck because they were built into the game (Asian Development Bank, 2022). But here's the thing: Roblox is still a business. The in-game purchases and digital economies create tension between educational objectives and profit motives (Omar et al., 2024). This raises questions about fairness: who gets to use it? Is education becoming a product? Teachers who use Roblox need ethical guidelines in addition to lesson plans to keep people from taking advantage of them. It also helps to connect platforms. Minecraft and SimCity are both planning games, but Minecraft is more about building on existing worlds. Roblox is different because it lets people work together to make things (Alkhaldi et al., 2023). It's more about co-designing cities than pretending to be them. This is in line with participatory design methods, where stakeholders work together to come up with solutions. Some thinkers use Habermas's ideas about communicative action or Dewey's ideas about learning by doing to explain this. In Roblox workshops, people learnt how to negotiate and work together, which are important skills for democracy. But critics say that without careful facilitation, these workouts will either stay surface-level or make existing inequalities worse (Kim et al., 2024; Omar et al., 2024). Connecting activities to larger civic goals and making sure that everyone has a voice are two ways to make it meaningful. In general, Roblox is at a crossroads. It has a lot of potential for constructivist learning and overall growth,

but it also comes with some risks related to community control and limited participation. There needs to be ongoing debate about how to balance innovation with fairness in digital public spaces, whether we use it in classrooms, city workshops, or seminars.

Objectives

- To learn how to use Roblox as a tool for urban planning
- To learn about the technical parts of Roblox that make it easier to work together.
- To evaluate Roblox as an instrument for participatory governance.

Design of the Research

This study employs a technical and pedagogical mixed-methods design, commencing with qualitative instruction for participants to gauge their intellect and design projects in Roblox Studio, followed by a quantitative assessment of Roblox's efficacy as a participatory tool in urban planning. This design was selected due to the ongoing review of a case concerning youth involvement in city planning via a gamified platform, which has not been thoroughly examined. Consequently, a comprehensive elucidation of the approach was necessary to explore emerging themes while employing systematic measurement of variables such as sustainability, participatory design, and tool engagement. The qualitative method includes rough city layouts and 3D models made in Roblox Studio. The quantitative method entails a survey regarding the utilisation of Roblox as a tool in participatory urban planning. These mixed methods assist qualitative outcomes in evaluating the quantitative patterns and trends regarding the tool's utility.

People who took part

The participants in this study comprised 100 undergraduate students enrolled in a design and animation program at an institution. The participants were between the ages of 18 and 28, which meant that they were all technically savvy and understood mobile gaming and creative digital platforms like Roblox (Alkhaldi et al., 2023). A sampling strategy was used to choose participants, so that there were a variety of design students with different levels of knowledge about gaming and design tools. This way, different types of perspectives and skills were represented. Choosing an academic institution provides an appropriate setting for participants to develop mentored city planning designs, while simultaneously granting the researcher access to participants for a specified duration. To enhance representativeness, participants encompass both genders and individuals from diverse economic backgrounds, recognising that their perceptions of ideal cities and levels of participatory engagement may differ. Along with the students, two faculty mentors were also included as secondary participants. They were both trainers in urban planning principles and observers who gave feedback on how engaged the students were in designing their ideal cities.

Sampling Strategies

Purposive sampling is facilitated by the formation of teams, wherein participants are organised into groups of ten, ensuring a balance between individuals possessing gaming experience and those lacking it. This team building makes sure that the group has a mix of skills and that the collaboration doesn't have too many highly skilled students working together. Each group has people with different skills that would be useful in urban planning situations where people with different kinds of expertise work together on projects to improve cities.

Data Collection Instruments

A strategy for collecting survey data is used. First, a workshop was held based on the participants' level of skill and understanding of game design tools. A basic questionnaire was used to find out how much they knew about urban planning ideas and digital collaboration skills, as well as how these areas changed after the intervention. These surveys have questions with multiple choices and questions with short answers. Second, all participants in the study were given reflective journals to keep track of how their thoughts, group interactions, and design projects changed over time. Third, the digital cityscapes made in Roblox were looked at using rubrics that looked at the design process, teamwork, and the value of the simulations and composition. Fourth, after the workshop, a survey was done to find out about the quality of

teamwork, how well people understood and learnt how to use the tool, and how participation was spread out among the group. This survey ensures the quality analysis of the project and the comprehension of each participant in a participatory approach to governance.

Process

The research is being conducted in three separate stages. In the first phase of teaching, participants go to sessions where examiners explain the study's goals, ethical issues, and rules of urban planning. After that, participants will fill out a simple questionnaire about their understanding of urban planning and their gaming skills. Participants will then learn about Roblox studio in a technical workshop. The training module will cover the basic interface, collaborative tools, and team-based digital output, which will teach participants how to work together to design something.

During the second evaluation phase, participants will need to show their finished city models to the facilitators. A presentation will be set up to explain how they understand and think about their city models, and their practical work will be connected to their theoretical work. Then, after that, a post-survey will be done and the digital outputs will be saved.

This is the three-day training module that will be used to train the participants. Each day, they will get two hours of training.

Day 1: Urban Planning + Roblox Studio Basics

Agenda

Time	Activity
0:00–0:15	**Icebreaker**: "Your Dream City" sketch & share
0:15–0:45	**Mini Lecture**: Urban planning principles (zoning, public spaces, sustainability)
0:45–1:15	**Discussion**: Local urban issues students care about
1:15–2:00	**Roblox Studio Intro**: Interface, terrain tools, basic building

Day 2: Designing for Inclusion and Participation

Agenda

Time	Activity
0:00–0:30	**Case Study**: Participatory design in real cities
0:30–1:00	**Group Brainstorm**: Stakeholder needs
1:00–2:00	**Build Session**: Students design inclusive public spaces in Roblox Studio

Day 3: Collaborative City Building + Showcase

Agenda

Time	Activity
0:00–0:30	**Team Formation**: Students form city planning teams
0:30–1:30	**Collaborative Build**: Teams co-create a mini city with zones, public spaces, and transport

1:30–2:00	**Showcase & Reflection**: Present builds, discuss challenges, and connect to real-world planning

Sources of Data

The study's data primarily comprises students from AAFT University Raipur and Dev Bhoomi University Dehradun. The data was gathered using a structured questionnaire survey method.

Limitations of the Study

The researcher possesses inherent limitations in each study, and the current study is not exempt from the following constraints:

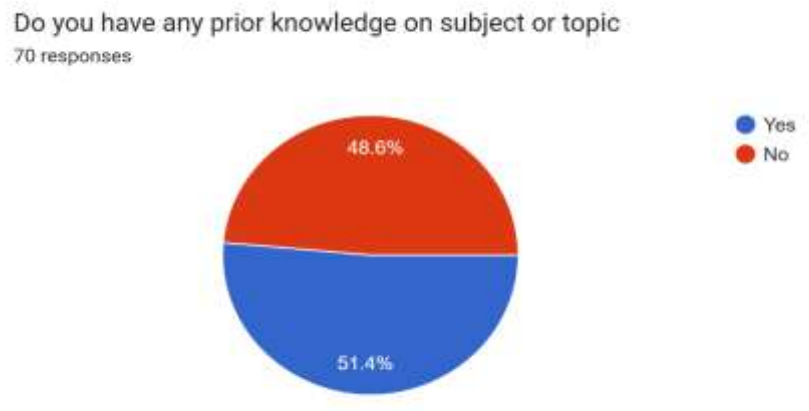
- The data has been collected over a span of 10 days for analysis and interpretation.
- This study is primarily conducted at AAFT University Raipur and Dev Bhoomi University Dehradun; other colleges and universities have been excluded. Because of this, it is hard to make generalisations.
- The time and technical aspects were also limiting factors.
- Because of time limits, only the pie data chart has been shown.

Analysis and Interpretation

This study aims to analyse and derive conclusions by examining respondents' perspectives on their participatory experiences in urban planning through Roblox Studio. The subsequent data will illustrate their experiences, highlighting the utilisation of Roblox as a tool. In which 92% of the people who took part were between the ages of 19 and 25.

Knowledge on Subject

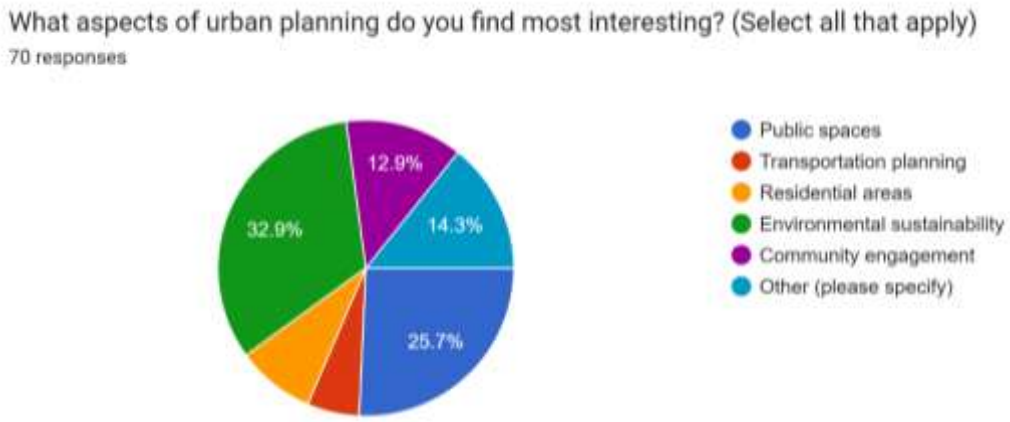
Students of animation design and creative backgrounds who had access to the internet and knew how to design games were asked about their knowledge of urban planning or Roblox. This was done in a complicated way that included a gamified approach and a participative method. The result is shown in the Pi chart below.



This analysis of the data reveals that 51.4% of participants possessed prior knowledge of urban planning and Roblox, while 48.6% lacked familiarity with game engines and had only limited understanding of urban planning.

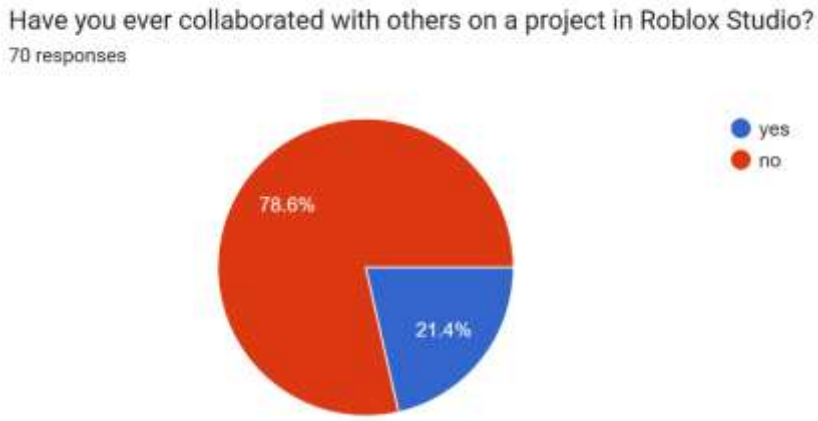
Interesting parts of city planning

After participants learnt the basics of urban planning, they were asked to share their thoughts on interesting parts of urban planning, like public spaces, transportation planning, residential areas, environmental sustainability, community engagement, and any other things they wanted to see in their cityscapes. The responses came from participants, and 32.9% of the students chose environmental sustainability. 25.7% of the people who took part chose public spaces. 14.3 participants chose other options, like parks for kids and people with disabilities, or ideas like mini forest areas for carbon neutrality. Then 12.9 percent of the people who took part chose community engagement areas.



Working together in Roblox Studio

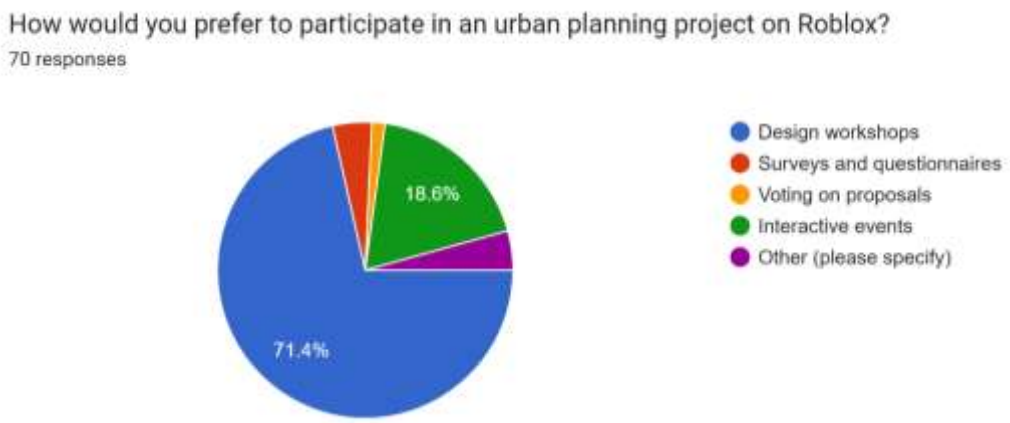
After evaluating their urban planning skills, participants with a background in game design were already familiar with Roblox as a game design tool. We asked them if they had ever worked on a team project in Roblox Studio, as the study said.



78.6% of the people who answered said they had never worked on or collaborated on a project in Roblox Studio, while 21.4% said they had already worked on a project in Roblox.

Mode of Participation in Urban Planning using Roblox

After we looked at the question above, we asked the people who took part. What kind of teaching style they would like to use to take part in the urban planning project through Roblox. The pi chart below shows the results.



The result shows that 71.9% of students wanted to take part in making a cityscape through a design workshop. 18.6% of students wanted a way to participate in urban planning projects through interactive events.

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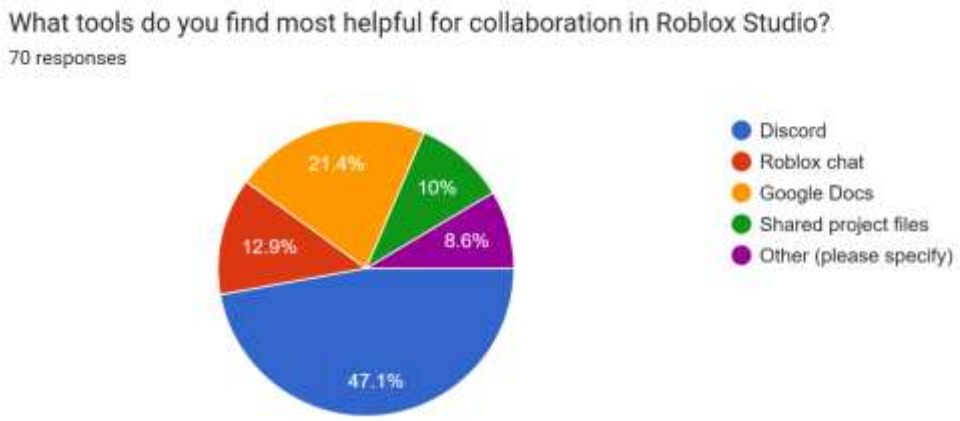
Roblox Collaboration Tools That Work

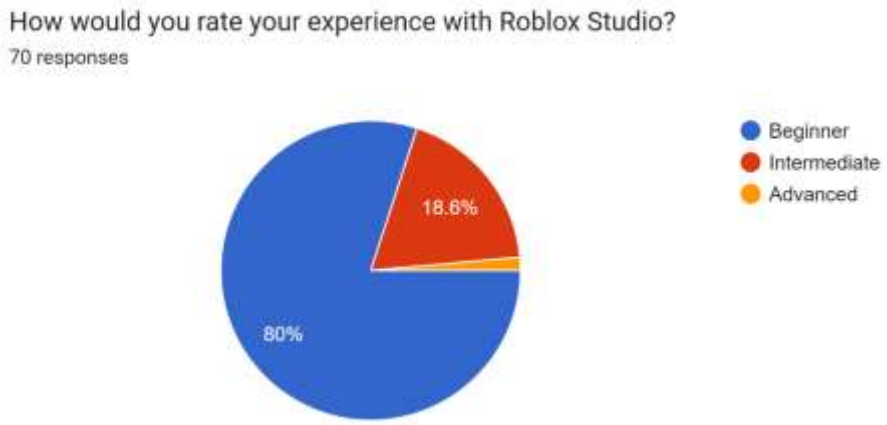
After using Roblox to make their project, participants were asked which tool they used to work together on Roblox that helped them connect. The answer is shown in the Pi chart below.



The results show that 47.1% of participants thought it was hard to communicate and work together in Roblox, while 22% thought it was easy to work together in Google Docs in Roblox Studio as a team. 13% used Roblox chat to talk to their teammates, and 10% used external drives to share projects with their teammates.

Knowledge of Roblox Studio

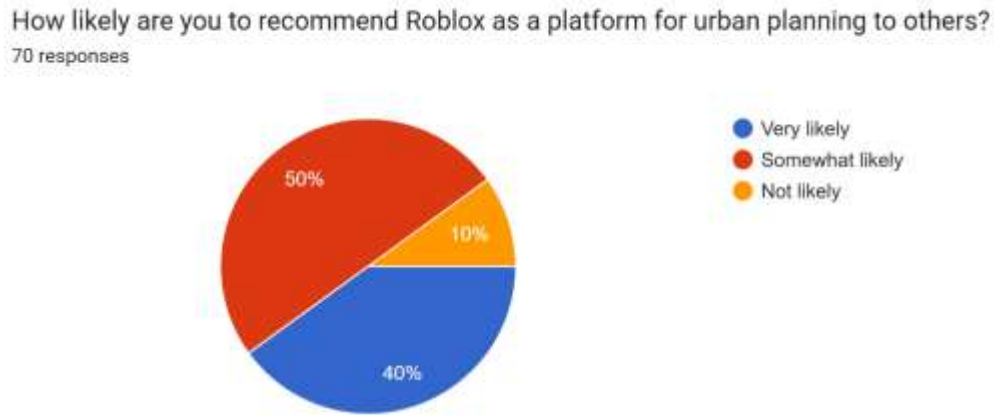
After using Roblox, participants were asked about their experience with it as a tool, such as how easy or hard it was for beginners to use or create in Roblox, and how technical it was to use or create in Roblox.



The answers are shown in the pie chart below. According to the response, 80% of participants were comfortable with Roblox and thought it was easy to learn. 18.9% thought it was at an intermediate level to work together or make things in Roblox studio, and 2% thought it would require a higher level of technical knowledge to use.

Roblox as a platform for urban planning

To determine the third and final objective established by the researcher, we enquired whether participants would endorse Roblox as a platform for collaboration and project creation for any participatory event.



The answers showed that 50% of the people who answered were somewhat likely to recommend Roblox as a tool because it requires technical communication and understanding of gaming. 40% of the people who answered suggested Roblox as a tool because it has an easy interface and tools that are good for beginners. 10% of the people who answered said it would be hard for people who don't have a design background to understand.

Conclusion

The findings of this study have substantial implications for the integration of gamified digital platforms, such as Roblox, in the instruction and application of urban planning, particularly for students possessing creative and game design skills. The findings underscore both the advantages and constraints of employing participatory methodologies in intricate subjects, such as urban planning, which typically rely on practical experience, technical expertise, and interdisciplinary collaboration. The study presented in this paper examines participants' familiarity with, interest in, group work preferences, and experience with Roblox Studio. Contributors aim to address these aspects, highlighting how a digital platform can serve as a conduit between creative learning and technical urban planning principles. To start, the participants had a fairly even amount of knowledge: 51.4% had some experience with either urban planning ideas or Roblox, while 48.6% had very little or none at all. This shows that some of the people who took part in the study already knew a little bit about the topic, but almost half of them didn't know anything about it before the study. This gap, however, is important because Roblox as a medium may have the chance to close the gap for learners at different levels. The fact that almost half of the people who took part were new to the subject and actively engaged with it shows that gamified tools can make it easier to get into and navigate more complex systems. A large number of people (32.9%) said that environmental sustainability was the most interesting part of urban planning. Students are becoming more and more worried about how urban design can include sustainability. Then, the high interest of 25.7% in public spaces shows how important social contact and public space are in cities. Also, the fact that 14.3% of students came up with unusual ideas, like a park for kids with special needs and disabilities and mini-forests for carbon neutrality, shows that students can come up with creative solutions to urban planning problems when they are given the freedom to do so.

A large number of people (32.9%) said that environmental sustainability was the most interesting part of urban planning. Students are becoming more and more worried about how urban design can include sustainability. Then, the 25.7% interest in public spaces shows how important social contact and public space are in cities. The 14.3% of students who suggested unconventional ideas, such as a park for special-needs and disabled children and mini-forests for carbon neutrality, also shows that students can come up with creative solutions to urban planning problems when they are given the freedom to do so. Another aspect examined was the function of communication and collaboration tools in facilitating teamwork within Roblox. Nearly half of the people who took the survey (47.1%) said that Discord was the best tool for working together, and Google Docs was the second best (22%). This result shows that Roblox Studio gives you a lot of creative freedom, but you need other tools to talk to each other, plan, and share resources. Only 13% of people used the in-platform Roblox chat, which is surprising. This suggests that in-platform communication systems may not be good enough for complex collaboration tasks. This means that in addition to Roblox, other tools and systems that are not part of Roblox should be used to meet certain learning goals. Teachers who want to use Roblox in projects about participatory urban planning may need to mix communication tools from the platform with tools from outside the platform.

Finally, when asked what they thought about using Roblox for city planning, the answers were mixed, but mostly positive. Half of the people who answered were somewhat positive about the recommendation because of the problems with the gaming system that needed to be fixed and the technical communication that needed to be made. On the other hand, 40% were sure they could recommend Roblox because it was easy to use and had a friendly interface. Only 10% thought it wasn't good for people who didn't know how to design or play games. The mix of these answers shows both the good and bad things about Roblox as a learning tool. It is an interesting platform that can help people be creative. But for it to work, there needs to be enough online support for instructional design and non-technical training modules. There is a lot of evidence that Roblox can be used as an educational and interactive tool for city planning. It has a well-designed and easy-to-use interface that makes it easy for even beginners to understand the more advanced features of the platform. Its ability to work together is like how people work together in real planning exercises. Still, to get the most out of the platform, people need to learn how to work together and use tools like Discord or Google Docs. It also seems that the best way to organise participation is through design workshops instead of free, unstructured events, especially when the goal is to learn something useful.

In short, Roblox has some problems, like not enough tech skills and communication breaks, but these can be fixed with targeted teaching and blended learning methods. Roblox is a great way for students to work together and come up with new ideas. It helps them learn how to plan cities in a way that is good for the community. Teachers can use participatory pedagogies and gamification scaffolding to stress social and civic engagement in order to build a strong, creative, and long-lasting response to the changing problems of cities.

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