

Game Jams as Pedagogic Playgrounds for Problem Deconstruction and Reflective Learning

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ABSTRACT

This research outlines lessons learned in leading social impact aimed game jams across communities, in Japan, India, and Malaysia. Instead of providing best practices for such events, this writing examines patterns demonstrated in how participants deconstruct societal problems and design experiences that reflect on them. The primary takeaway is the intense constraints of game jams encourage jammers to deconstruct the social impact challenges on which they have focused their games in unique ways. These deconstructions can be understood as a translation, seeking to convert participant interpretation of problem causes and their solutions. The authors posit that the most important outcomes for game jams are not necessarily the games produced, nor the practice earned in making games, but the learning that occurs through assessing a problem, translating into a playable experience and aiming to represent its essential elements as identified by the participants.

Keywords

Game jams, social impact, pedagogy in game making, mechanics and meaning, game design

INTRODUCTION

Research in games jams has persisted alongside work for hackathons through the past 20 years (Lai et al, 2021). Seminal work in this domain typically includes an emphasis on the value of such events in learning (Fowler et al., 2013) and their value in the domain of serious games (Ramzan and Reid, 2016). Notably much of the work that aims to understand the value of game jams focused on the outcomes in the production of games, the development of specific skills (Contreras-Espinosa and Eguia-Gomez, 2022), design or in a more limited case the impact of teamwork and community (Preston et al, 2012). Similarly, observations about the educational value of game jams emphasizes their value in learning both soft skills like collaboration as well as concrete skill based outcomes like science, technology, engineer, arts and mathematics, or STEAM fields (Meriläinen et al 2020). However, little research examines the outcomes of such work on the participants beyond the practicalities of designing and developing games.

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Earlier work by members of this research team noted that one very important outcome in game jams is their potential to better develop participant understanding of complex issues (Grace and Sekhon, 2024). That is, game jams are not only a means to an end, but they are also an end in themselves. Game jams, like playgrounds, are not simply spaces to play with game design, but are a kind platform for exercise that shapes understanding of problems and solutions. This aligns with the authors prior work on explaining a game as a collection of designer created problems as game challenges and solutions as game verbs (Grace, 2019). Focusing on social impact topics, for example, offers a kind of jungle-gym, where other game jam foci might be analogous to another type of playground equipment.

This work aims to offer a theoretical frame that applies the digital games research association 2025 thematic focus of playgrounds to the observed patterns of game jam participants from 4 jams co-organized by the author. The insight in this work draws from the experience as a game jam co-organizer, trainer and consultant for 4 game jams between 2023-2024. These jams were Games Bagus (Bashir, 2022), Jam Packd (Edex Live 2023), Young Southeast Asian Leaders Initiative (YSEALI) Game Changers (U.S. Embassy Malaysia, 2023), and the Kyoto Game Jam (2024) taking place in Kuala Lumpur, Malaysia, Ahmedabad, India, Kyoto, Japan, and Kuala Lumpur, Malaysia respectively. These were operated with the support of United States Embassies and Consulate General, regional embassies, regional non-governmental organization including Biji-biji Initiative (Malaysia), Synapze (Malaysia), Innovator's Path (Japan), and commercial game companies including Ubisoft, Square Enix, Sony Playstation Studios-Malaysia. Educational partners included the Kyoto University of Foreign Studies and Anant University.

INTERPRETING GAME JAMS AS PEDAGOGIC PLAYGROUNDS

Notably, the intensive process of game jam work is an opportunity to educate beyond the conventional elements of game design. From prior research there's clear opportunity for game jams to not only function as means for practicing game design and implementation individually, but instead as opportunities to convene communities to think critically about a myriad of problems (Shin et al, 2012). Thus, the game jam functions not only as a practice space, but as a space for community convening, reflection and exploration. This research aims to provide further lessons learned in not only organizing game jams across communities of game-familiar and game-unfamiliar groups, but also in assessing the potential for such work to better inform participants. Just as playgrounds evolve not only as a place through which play is encouraged, but also as foundation from which community develops. Playgrounds are social spaces, much like game jams. These social spaces are not only evidence in the dynamics of the often-young people who use them, but also for those who have brought them to the playground and those who watch.

CONCLUSION

Game jams themselves are much like asking students to teach. They require the participants to not only create, but to interpret and understand. The synthesis that occurs in that learning is not only meaningful to further understanding game design and development, but it also helps increase the participants understanding of the complexity of the problems they are examining through play. Notably they are examining not in terms of reporting the problems and plausible solutions, but instead in synthesizing solutions and prescribing them through design itself. That is, if game

design is a collection of problems and solutions then they are learning the problems, prescribing in game solutions and testing that frame through a simulation they have created. Games are the equivalent of not only converting students to teachers as a means of learning, but also of making them scientists testing hypothesis they're examining through a design process. The accelerated pace and collaborative nature of game jams amplify these characteristics, requiring participants to examine the subject of their designs, reduce complex issues to their simplest elements, and reflect on the simplest ways to communicate through the mechanics, dynamics, and aesthetics of game designs.

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