Exploring Collaborative Practices in Video Game Development: An Ethnographic Study

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Keywords

Game production, video game development, ethnography, collaboration, interdisciplinarity, design process

CONTEXT

This study explores the interdisciplinary collaborative process of video game development within medium-sized studios. The research focuses on understanding how the multidisciplinary nature of game development (Balland, De Vaan, and Boschma 2013; Musil et al. 2010; Klimas and Czakon 2022)—primarily involving game design, art, and programming, but also including other roles such as sound design, narrative writing, quality assurance, and production management— evolves into a collaborative exchange between these disciplines, and how multidisciplinary practices in game development transform into interdisciplinary collaborations (Mazijoglou, Scrivener, and Valkenburg 2000; Chou and Wong 2015).

Multidisciplinary collaboration involves several disciplines working together on a common problem or project, but each discipline approaches the problem from its own perspective and methodology. Each discipline works in parallel, contributing its own insights and methods without necessarily integrating them with those of other disciplines. The disciplines are juxtaposed, meaning they are placed side by side but remain distinct and separate. *Interdisciplinarity* involves integrating knowledge, methods, and perspectives from different disciplines to create a cohesive approach to a problem or project (Cross 2006; Montuori 2013; Nicolescu 2014).

The study aims to identify the different visions of collaboration within game development studios, understand the challenges and opportunities associated with

Proceedings of DiGRA 2025

each vision, and examine the impact of these collaborative practices on the overall development process and team dynamics.

METHODOLOGY

The research adopts an ethnographic methodological approach (Creswell and Poth 2016; Hammersley and Atkinson 2019). This method allows for an in-depth understanding of the cultural, social, and personal dimensions of collaboration within the studios (O'Donnell 2014; Whitson 2018).

This study was conducted in three medium-sized independent game development studios based in Canada. Each project team consisted of approximately 20 members, with most working on-site and a few participating remotely. One studio operated across two locations within the country, another collaborated closely with a partner studio in another country, and the third was centralized in a single location. The teams primarily communicated in a mix of French Canadian and English, reflecting the bilingual nature of the region. While the majority of employees were white Canadians, all studios had diversity policies in place and actively sought to include underrepresented groups, particularly women and non-binary individuals.

The studios were developing games for different platforms, which influenced their production focus and collaborative dynamics. Although specific game genres and titles cannot be disclosed for confidentiality reasons, all studios maintained publishing relationships with larger companies to support commercialization.

Multiple collaborative activities were documented over several months through direct observations, audio and video recordings, and semi-structured interviews. This included formal in-person and virtual meetings, ad hoc conversations, and other interactions.

RESULTS

The study revealed three main models of collaboration: Object-Centered, Process-Centered, and Actor-Centered (Findeli and Bousbaci 2005).

Object-Centered Collaboration

In Object-Centered Collaboration, decisions within the team are primarily justified by emphasizing the quality of the end product, the game. This approach, also called “design driven” by participants, implies that game designers define the game experience, and other professions (artists, programmers) must serve the design. Strong direction from designers can lead to a cohesive and high-quality game, as designers are perceived as the conductors of the project. However, this approach can create tensions, especially for artists who seek more creative freedom. While programmers generally accept producing tools and serving the design, artists often wish to participate more actively in shaping the vision.

Process-Centered Collaboration

In Process-Centered Collaboration, collaboration is primarily achieved through task organization and project management. The project manager (or the producer) plays a key role in planning the meetings where collaboration occurs. Effective task distribution and project management can streamline the development process and

ensure that all team members are aligned with the project's goals. However, bottlenecks can occur if key decisions depend on a single person, such as the creative director. If collaboration does not occur in their absence, each specialty progresses until it becomes blocked and rarely consults directly with other professions.

Actor-Centered Collaboration

In Actor-Centered Collaboration, the competence of the actors is at the heart of the collaborative process**.** Studios use "strike teams" or "cells," where a person from each specialty (art, design, programming) works together on specific aspects of the project. This setup aims to facilitate multidisciplinary collaboration and interdisciplinary exchanges. This approach seems more focused on the actors' fulfillment and relies on their ability to exchange ideas around their respective specialties. It can foster a more inclusive and interdisciplinary environment. However, this approach can lead to validation and power circulation issues. For example, ignoring the technical director's advice can allow good collaboration but lead the feature down a dead-end path.

These findings highlight the complexities and nuances of collaboration in video game development, revealing both the challenges and potential benefits of different collaborative approaches. The difference between multidisciplinary collaboration and interdisciplinary collaboration is not as clear-cut as in the literature. In practice, studios may shift between these models over time, depending on project phases, team composition, or leadership changes. Such shifts often redistribute power and redefine how collaboration is enacted within the team.

Importantly, no single model is inherently better or worse; each reflects different internal dynamics and values. The suitability of a model depends on the specific context of the studio, the nature of the project, and the composition of the team. Recognizing these models can help studios reflect on their collaborative practices and adopt strategies that align with their goals, values, and workforce.

The study also questions what is truly meant by collaboration in game studios. Indeed, some studios focus on economic efficiency and hierarchical structures, while others emphasize team fulfillment, interdisciplinarity, and a motivating work environment. These visions are also reflected in working conditions, such as remote work and transparency on company profits.

In conclusion, collaboration is more than just a juxtaposition of expertise; it becomes an ideal that can significantly impact workers' lives, especially in an industry facing crises.

ACKNOWLEDGMENTS

We would like to sincerely thank the participating studios for their time, openness, and collaboration throughout the research process.

This research was supported by the Social Sciences and Humanities Research Council of Canada (SSHRC), grant number 30-2022-00726.

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