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VIDEO GAMES FOR GOOD

Game Design Principles, Game development: pre-production phase

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Duration:	3 weeks (2-3 hours each)
Age:	20 – 30 years
Group size:	Groups of 4 or individual
Aim:	To equip participants with the foundational game design knowledge
Objectives:	• Understand and design Game Loops and Core Gameplay • Explore Game Bricks • Plan long-term player motivation and progression
Material needed:	Prototyping tools (Figma, Miro, LucidApp), game engines (GameMaker, Construct3, Unity, Unreal) with appropriate templates or plugins for specific game types.

This workshop guides participants through the more detailed development of their game, the pre-production phase where the game concept is expanded and solidified. They explore and apply game design concepts from the core gameplay design to the creation of game bricks and their combination to create a longer game experience.

Workshop Structure

1. Game Design Principles (1 hour)

Week 0: Game concept

If participants don't already have a game concept (activity 1), they should spend time finding one. They should define what they want their players to feel or learn when playing their game.

Then, they should define their Design pillars.

Have them look at, for example, game design pillars from games, or have a small activity where you give them a list of games and a list of design pillars, and they must guess which game they belong to.

Week 1: Charting core gameplay (3 hours)

Participants decide the 3Cs of their game: camera, controls, and character. Have them explain why they make these choices.

- How is their game controlled?
- What does the camera look at?
- From which distance?
- Is it manual or automatic?
- What can the main character do?
- What are their abilities, how fast do they move?

They can prototype their game views using a prototyping tool like Miro, Figma or LucidApp.

If the combination of their 3c match a well-known game genre (visual novel, platformer…), they can search for a game engine or prototyping tool that can help them test their 3c's fast. For example, construct3, GameMaker2, or plugins/templates for Unreal Engine, Unity, Godot… If they are not reinventing the wheel in terms of gameplay there is probably a template that exists for their game type.

To ensure they have good core gameplay, participants must figure out the challenges in their game. What questions do the players ask themselves while playing to solve these challenges? For example, micro decisions in an action game can be: should I use many fast, light attacks or one slow, heavy attack? Which obstacles should I focus on? In which order? Using what tools?

Week 2: Design Game Bricks (3 hours)
Once participants have decided on a core gameplay (3Cs), they should think about how they can create various situations using game bricks.
These bricks can be enemies, obstacles, or events… that complement and enrich the core gameplay.

Ask learners to think about aesthetics, mechanics and dynamics:

- What emotion or experience should the brick create? (e.g., tension, curiosity, excitement).
- What is the brick's in-game rules/behavior?
- How will players interact with it?

For example, the coop horror game Lethal Company has a simple first-person core gameplay, but each new monster the game adds brings a new variation to it Week 2: Prototyping
Teams will spend two hours creating a digital or paper prototype of their game, focusing on a single core mechanic. This session allows participants to delve deeper into the hands-on process of developing their game concepts. For example, a team might develop a board game that simulates managing a city's water supply, requiring players to make strategic decisions about resource allocation and infrastructure development. Alternatively, another group could design a card game that represents the delicate balance of ecosystems, where players must manage various environmental factors to maintain ecological harmony. By dedicating more time to this phase, teams can iterate more effectively, refining their designs based on initial feedback and exploring different creative solutions. This session emphasizes collaboration and problem-solving, which are essential for creating impactful games with transformational goals.

Week 3. Engagement and Motivation (2 hour)
Now, participants should plan for the long-term progression of their game. How will they spread the game bricks during playtime? What tool, skill, new mechanic, or obstacles… will appear throughout the game.
Participants should find ways to increase challenge as well as the competence and in-game capacities of players.
To maintain players engaged, a good way is to think about the game as a Russian doll of game loops. A game loop is composed of an Objective, a challenge, and a reward. There are several sizes of loop in a game: long term loops: finishing enough levels to reach the next chapter which rewards with a new environment, or enemy type. Defeating enough enemies to get enough XP to buy a new skill.
Have participants identify the several sizes of game loop within their game.
You can have a small activity to exemplify this with world of warcraft loops exemple, have participants put back the loop components of this table:

Moment to Moment	*Minute to Minute*	*Hour to Hour*	*Day to Day*
1. Spot Resource 2. Face Enemy	1. Spot quest giver 2. Acquire quest	1. Complete quests 2. Craft best gear	1. Travel new zones 2. Set new goals
3. Evade Attack	3. Chart path to quest	3. Adjust spells / talents	3. Make new friends
4. Defeat Enemy	4. Complete quest	4. Sell extra resources	4. Plan for raids
5. Collect Resource	5. Return for reward	(↻ repeat)	5. Complete PvP
(↻ repeat)	(↻ repeat)		(↻ repeat)

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