



GREEN GAME STUDIES PROJECT BRIEF 2

CGL
Cologne Game Lab

Technology
Arts Sciences
TH Köln



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Co-funded by
the European Union

Method – What is Project Based Learning?

Project Based Learning (PBL), with the overlapping teaching methodology 'Role Based Learning', is a system of applied education where students are given a complex task to achieve and must learn self-organisation, task division, progress reporting, complex soft skills (negotiation, accountability, communication, etc.), alongside the practical hands-on skills of developing a product. It has been successfully applied at Breda University of Applied Sciences since approximately 2017.

One advantage of PBL is that it gives students creative freedom to explore a concept and approaches to the tasks. There is no rigid pre-set outcome. This freedom typically creates more intrinsic motivation for students in their work. They can express themselves and their interests through the project, creating results that both surprise them and which provide valuable portfolio materials for finding work in creative industries.

Alongside a main project description, a typical PBL brief sets obligatory targets and has optional modifiers. The main targets can be set to align with the learning outcomes of the educational programme, e.g. use of realistic materials, multiplayer networking, or in-game economy balancing.

Optional modifiers are set for multiple reasons. They add extra challenges, but also to give the team a first chance to discuss and agree on the modifiers they wish to use – this provides an early exercise in decision making. Through this, the students also become further invested in their work.

Assessment

We strongly encourage individual assessment – each student should keep an activity log, where they set goals for skills and knowledge they wish to acquire and track their progress.

Do not assess students on the overall quality of the final game, instead assess them based on their individual contribution to the game. Make this clear to students from the beginning, so they can ensure they keep records of their personal work, e.g. 3D models, design documents, before/after examples of coding, audio loops, video clips of animations, etc.

Project Based Learning – Example 1

Green bargaining brief

Create a board game in which each player has a different objective. The game simulates a society transitioning towards sustainability, but not all players have 'win' conditions that result in a sustainable world. The setting of the game is open, e.g. it can be modern day, historical, science-fiction, etc.

Player's objective: Complete their personal objective.

Project duration	2 weeks
Recommended team size	2-3
Requirements	<ul style="list-style-type: none"> • Board game (can be a deck of cards, board, or any other non-digital game) • Gameplay pieces must visually reflect the game's setting • Each player has a different 'win' condition, and some MUST conflict with others (not all have to be eco-positive) • Multiplayer • Eco-conscious message embedded in gameplay, not only as a visual theme.
Optional modifiers*	<ul style="list-style-type: none"> • Multiple pre-defined starting scenarios • Randomised starting scenarios • Added single-player variant (in addition to multi-player rules) • Dice (or other random number generator) used for key gameplay mechanic • One player ALWAYS has a secret anti-environmental agenda • Half of player have an anti-environmental agenda • Half of players are forces of nature, the others are human • At least two forms of in-game currency • The game is player-versus-environment (all players are pitted against the game's system).

**you MUST pick at least two (you can do more). Teachers must be informed of your choice by the end of week 1.*

Deliverables

- All necessary materials for playing the game are clearly recorded, e.g. in a folder containing clear images of all pieces and/or pdfs
- Rules of play in a doc/pdf or other equivalent format
- 'Quick setup' guide
- A video explaining setup and first round of gameplay is uploaded to YouTube (or equivalent) – deliver a link in a text or doc file
- Learning log (per person)
- Personal work portfolio (examples of personal contribution to the game's creation).

Credits & Acknowledgements

The creation of these resources has been (partially) funded by the ERASMUS+ grant program of the European Union under grant no. 2021-1-DE01-KA220-HED-000029501. Neither the European Commission nor the project's national funding agency DAAD are responsible for the content or liable for any losses or damage resulting of the use of these resources.

The project "Greening Games. Building Higher Education Resources for Sustainable Video Game Production, Design & Critical Game Studies" (2021-2024) supports educators in addressing the interdisciplinary nature of green digital gaming.

More information may be found at: <https://greeningames.eu>.

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