GREEN GAME STUDIES
PROJECT BRIEF 1

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

Planetary crash survivor brief

Create a science-fiction game about crashing on a new planet with limited natural resources. The gameplay should feature a harvesting loop (gathering materials and tending to nature) and a management loop (researching methods for supporting the natural ecosystem without disrupting it).

Player's objective: Undo the damage caused by crash-landing on the planet and collect sufficient resources to leave the planet.

Project duration	18 weeks
Recommended team size	5-15
Requirements	• Unreal Engine 5 • Stylised visuals • Eco-conscious message embedded in gameplay, not only as a visual theme • Science-fiction
Optional modifiers*	• Upgradeable traversal mechanics • Third person perspective • First person perspective • God-view perspective • Lost-civilisation backstory on the planet • 15+ distinct animals in the ecosystem • 3D cutscenes • 2D cutscenes • Facial animation • Use new motion capture data.
Deliverables	• Folder containing playable build • Learning log (per person) • Trailer (story, gameplay, or both) uploaded to You-Tube (or equivalent) – deliver a link in a text or doc file • Personal work portfolio (examples of personal contribution to the game's creation).

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

Credits & Acknowledgements

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