



Game-based Learning Skills

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Course overview

A raison d'être for **designing, planning and orchestrating Game-Based Learning (GBL)** is in its inherent potential to impact student's learning by providing motivating, playful and engaging learning experiences. There is consensus that GBL integrates and combines **constructivist learning theories** with **game-like elements** as means to provide self-regulated, goal-centred, creative and situated learning. While research investigations into the design and use of GBL as a **pedagogical approach** commenced in the early 2000s, there were assumptions that GBL may be viewed as a distinct breed of semiotic domains that afford students to employ different multimodal ensembles or as a design experience from which students are learning to think **creatively**. Such design experiences may encourage students not to necessarily learn how to absorb and transmit content, but most essentially how to understand the process of learning through **designing, playing and making**.

Despite frugal debates in **meanings** between GBL, **serious games and gamification** for this course we perceive GBL as an umbrella term to denote a student-centred and creativity-orientated strategy, collaborative and social in its foundation, that amalgamates constructivist learning theory and game elements embracing spaces for practicing creative thinking, inquiry and resilience. Serious games as tangible digital products may constitute a specific activity designed or re-used/repurposed encompassing a broader GBL strategy. In ditto, as part of a wider GBL activity, gamification may be proliferated as a route to transform specific learning design elements (e.g. assessment, feedback, progression) to game-like instances via scores, badges, and leaderboards at its simplest instantiation.

In this course, participants will have an opportunity to learn about the **foundations of GBL** including, **theories, design aspects, models, tools and processes** that may be adopted by teachers for integrating GBL into their teaching practice. The course will run in **three Units**: **Unit 1** will present theoretical foundations, perceptions and definitions of GBL. **Unit 2** will contemplate on learning models, strategies and approaches to using GBL in the classroom. **Unit 3** will present design aspects of GBL for designing GBL activities including serious games and gamification tools as best practice examples for teachers to use and employ in their practice. The course is based on an **activity-based design** model and adopts a **micro-learning** approach hence it will encompass mini activities for the participants to be engaged in for a limited amount of time.

Course aims and objectives

The aim of this online course is to elucidate on how GBL and associated practices, tools and resources may be used in teaching and learning. In particular the course objective is to help the participating teachers to understand and use GBL in their own teaching context.

The overarching question that this course addresses is:

“How GBL may be theorised, understood and used in school educational settings?”

Course outline

Unit 1	Topics covered	Unit's Learning outcomes
Theoretical foundations of Game-based Learning	<ul style="list-style-type: none"> • GBL introduction • GBL meanings • Serious Games meanings • Gamification meanings • Differences between GBL, serious games and gamification • What do we mean my play and game? • Examples of GBL, serious games and gamification • mini activities 	<ul style="list-style-type: none"> • Participants will have an awareness of the foundations of GBL • Participants will be able to understand the differences between GBL, serious games and gamification • Participants will be able to differentiate between play and game

Unit 2	Topics covered	Unit's learning outcomes
GBL strategies, processes and approaches	<ul style="list-style-type: none"> • GBL explained as an instructional strategy • GBL and creativity • GBL and collaboration • GBL and projects • GBL and empathy • GBL and failure • GBL and community building 	<ul style="list-style-type: none"> • Participants will be able to comprehend how GBL may be used as an instructional strategy • Participants will be able to demonstrate awareness on how GBL may integrate aspects of creativity, collaboration, projects.



Unit 3	Topics covered	Unit's learning outcomes
GBL design and best practices	<ul style="list-style-type: none"> • What is GBL design? • GBL, serious games and gamification design elements • Learning mechanics • Game mechanics • Dynamics and aesthetics • Rules • GBL and uncertainty • GBL design best practices 	<ul style="list-style-type: none"> • Participants will be able to understand GBL design • Participants will be able to have an awareness on GBL mechanics, dynamics and aesthetics • Participants will be able to have an awareness on designing uncertainty • Participants will be able to have an awareness of GBL design best practices

Course schedule

Week	Day	Taught Unit
12/04-18/04	12/04	Unit 1
12/04-18/04	13/04	Unit 1
12/04-18/04	14/04	Unit 1
12/04-18/04	15/04	Unit 2
12/04-18/04	16/04	Unit 2
12/04-18/04	17/04	Unit 2
12/04-18/04	18/04	Unit 2
19/04-25/04	19/04	Unit 3
19/04-25/04	20/04	Unit 3
19/04-25/04	21/04	Unit 3
19/04-25/04	22/04	Unit 3
19/04-25/04	23/04	Unit 3
19/04-25/04	24/04	Unit 3
19/04-25/04	25/04	Unit 3