

Teaching Objectives

The learning objectives follow four main learning effects of serious games in teaching innovation sciences as proposed by Bogers & Sproedt (2012) in their article "Playful Collaboration (or Not): Using a Game to Grasp the Social Dynamics of Open Innovation in Innovation and Business Education":

1. **Enable critical reflection on social dynamics and experience-based learning** – applying the learning of reflections and experience through iteration. Teams have to show their ability on this aspect by a continuous approach on playing the game and a growing amount of awareness of the gameplay and progress based on results and reflections.
2. **The game enables to students to create a more holistic understanding of complex social dynamics when dealing with novelty.** Teams have to show their ability on this aspect by preferring a long-term oriented focus and a strategic perspective on running an innovative organization over a short-term oriented focus with a focus on operational results.
3. **A deeper understanding of innovation sciences.** Teams have to show their ability on this aspect by taking "wise" decisions in the game. Wise decisions match criteria such as: effectiveness within the changing context of the simulation, efficiency based on the return on investment (in time, quality and money), coherency between different decisions taken and coherence over the years.
4. **Creating a shared experience of social dynamics and the paradox of co-opetition for the students.** Teams have to show their ability on this aspect by an indication of strategic focus over the years and a certain amount of logic correlation between the decisions taken in different years. Effective teams collaborate in order to take well-thought decisions. Less effective teams often don't talk about long-term strategies and don't support each other on taking smart decisions. This will be reflected by a lack of strategic focus in the game.

Example RUBRIC

Learning Objective	Description	Points/question	Not good	More or less good	Good
Students are able to reflect critically on the experience and social dynamics of the group in order to be able to formulate points of attention for both their personal development and the group performance.	in their assignments the students prove to be future-oriented, visionary, problem-oriented and take into account important trends and scenarios. It testifies strategic and contextual thinking abilities.	5 points	0-3 points The group doesn't show a thorough analysis of the team results and KPI's.	4-7 points The group performs a basic analysis, but doesn't deduct correct conclusions.	8-10 points The group performs a good analysis with interesting conclusions
	Students are able to analyse the group's innovation performance in order to discuss and improve strategic thinking when it comes to dealing with innovation.	in their assignments students evaluate their results and their strategy and goals are pattern-breaking, innovative and challenges the established by evaluative thinking.	5 points	0-1 points The group is not able to change or perservere a strategy based on the analysis.	2-3 points The group creates new goals, but they aren't SMART-formulated or argued.
Students are able to share implicit and explicit knowledge in the special paradoxal situation of a competitive game-environment in order be able to experience real-life situation they would encounter as an innovation manager.	in their assignments students indicate a sense of realism, feasibility and sustainability.	5 points	0-7 points The group is not able to write a literature review based on academic papers and correct sourcing.	8-14 points The group writes a literature review that is based on a limited number of qualitative sources.	15-20 points The group writes a literature based on good sources and draws conclusions which are useful for the game.
	in their assignments students prove to have researched the literature, studied the basics, developed an understanding, are able to relate different topics to each other and are able to form an opinion about it.	20 points	0-5 points The group doesn't analyse their group performance based on the table in the game manual	6-10points The group analyses their group performance to a certain extend.	11-15 points The group analyses their group performance and draws usefull conclusions for the game.