**Project – Based Learning (PBL)**

**Template**

Project-Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an engaging and complex question, problem or challenge

**PBL code name:** C13\_S2\_5

**PBL title: Decision-making in the Entrepreneurial Process**

**Project Idea** *Summarize challenge, scenario or problem. How would you describe the project to the trainees? What will students do / learn?*



The case study is related to discharge of acidic mine water from one mine of the company after excessive rainfall. Following a description of an initial scenario that is presented to the students, the overall aim is presented with proposition also of a propose a short and long-term monitoring and clean-up strategy.

To accelerate the implementation of the recovery measures it could be necessary to stop the activities also in the other mines for one week. This will allow the companies in charge of analysing the situation in the mine to be able to operate more effectively and safely; the companies in charge of carrying out the geological and soil consolidation works will be able to intervene immediately. It is likely but not sure that these types of interventions will limit the penetration of acidic substances into the soil. Consequently, the interventions that will have to be carried out for environmental restoration will be smaller and more effective and the risks of pollution of the groundwater in a larger territory will be greatly reduced.

On the other hand, the shutdown of the company's activities will result in a serious economic loss, because, among other things, the company is working for a very important client. In the company, some managers suggest not to stop production, to complete the work for the customer. The companies in charge of environmental restoration can carry out some initial works and partially reduce the impact of the spill. The area in which the company is located is not very populated and there does not seem to be any direct and immediate significant risks to the human health of local populations. The company has also received a complaint from an environmental association, while, at the same time, part of the employees is worried about the stop of work activities.

**Driving Question(s)** *Projects should be framed by challenging and open-ended question(s)*



a) is there a corporate priority plan in the general management of the company? b) what is the company policy in terms of environmental sustainability? c) is the company ISO14000 or EMAS certified? d) does it exist in the risk management plan ? e) how is the environmental risk or cycle stability balanced? productive ?, f) is there awareness of environmental damage?

**Objectives** *Please describe and list the objectives here*



* Acquire the ability to evaluate complex situations with solutions that have advantages and disadvantages
* compare different solutions that balance different interests
* Identify functions and roles that can support in the analysis of business scenarios
* Make preliminary cost estimates when choosing options
* To assume attitudes of assumption of responsibility



**Tasks** *What task(s) / requirements should the students complete?*

* Analysing the situation describing possible both scenarios (one related to the environmental aspects another one to the production side)
* Choosing one of the two scenario and maximizing its values and interests while identifying mitigation measures for the opposite interests
* Elaborate a communication plan explaining the situation and the reasons and motivations of the choice



**Notes** *This is where students can record their ideas and research as they gather the information needed to complete their project*

*Learners are invited to look for and collect cases and practices about decision-making linked to environmental issues and / or environmental sustainability with a win-win solution.*



**Project Plan** *After research, this is where students will write down the plan for their project*

*Students are invited to record / shot a two-minute video of the case.*

*Each learner will choose a position and motivate it.*

*The position will be analysed and compared the most convincing decision-making approach will be identified*