Active mining in Minecraft

	Target age	
	Age 14 and over	
	Level of difficulty	
	Medium	

Key words:

Mining, exploration, sustainability, waste, entrepreneurship, creativity

Abstract of the activity:

The "active mining in Minecraft" toolkit fits best as a homework or project-type exercise to be carried out over a few. Students should be organised in groups and tasked to build and describe a given real mine in the game Minecraft using satellite imagery from google maps or alike. Students will try to rebuild the given mine to the best of their ability in Minecraft. A presentation is done after the creative stage; results are compared with each other and the team that has built the best mine replicate is winner team.

Learning Goals:

- Recognize the different facilities connected to a mine, such as an open pit, a shaft of an underground mine, a tailings dam, waste rock dumps, etc.
- Outline the mining cycle and explain the path from rock to metal concentrate in a mine based on real world examples.
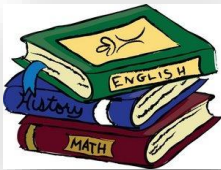
Summary

	Specific Abilities - *At the end of the activity the student will be able to:* • Prepare a 3D model of a real mine within the game Minecraft, constructing the different parts by distinguish them from information gathered from the internet, such as maps, satellite images, photos, documentation etc.
	Cross-curricula Links • Geography • Physics • Technology • Economics/Economy • Ecology/Environment
	Prerequisites • It is good with some knowledge about Minecraft and how to set up servers for gaming, but not necessary. • Some knowledge on mining is good, for example through a lecture before the toolkit competition.
	Time requirement 2-3 days. - 1 hour preparation first day on description of mine site facilities - Creative stage one or two days (in Minecraft) - 1 hour presentation per groups on day 3. **Instruments** (eventually): Computers, Minecraft with license, Bettergeo, but not mandatory (www.bettergeoedu.com).
	Learning and Teaching Support Materials - What you can find in the toolkit 1. Teacher card
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