

IDENTITIES

Enlightening
Interdisciplinarity
in STEM
for Teaching

Complexity activity

Analyst Activity

Co-funded by the
Erasmus+ Programme
of the European Union



Grant Agreement n°2019-1-IT02-KA203-063184

Analyst activity

Climate Change complexity

“CC is a complex STEAM theme, that intersects science and society and that, if it properly addressed at school, it can be a source of knowledge, from which a student can be guided to develop systemic thinking, skills of embracing ambiguity and uncertainty, competences of managing the tension of feeling home and explore the unknown...”

Articulate this sentence, by referring to the knowledge, the methods, the approach you have experienced during the IDENTITIES module

PART 1 - COMPLEXITY AS EPISTEMOLOGICAL ACTIVATOR AND BOUNDARY OBJECT

40 mins

Work in three groups (20/30 mins)

1. Which **epistemological questions** (i.e., on the nature of science) can a reflection on complexity and on the properties of complex systems (e.g. non-linearity, feedback, emergent properties, limited predictability, critical states, tipping points, bifurcations, ...) open?
2. What impact on curricular topics? What do these themes “**activate**” at **epistemological level** to highlight and/or question foundational aspects of the disciplines? (prompt: think about the parabolic motion)
3. Which of these concepts would you choose as an example of a **boundary object** to show the interdisciplinarity and the features of the disciplines?

10 mins - sharing all together (one group starts and the others add)



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