STRATEGIC PARTNERSHIP
AGENTS OF CHANGE IN EDUCATION

STEAM Recipe

Theme	**Global warming with a focus on the Netherlands** • Ice caps • Sea-level (Netherlands) • Natural disasters • Industrial Revolution
Target Age Group	14 – 17 years Note: It's possible to simplify this plan to work with younger students.
Duration of Activity	3 lessons (40 – 50 minutes every lesson) Maybe it could be 4 lessons.
Resources/Materials Needed (exact details required)	• Papers • Pen • Colours • Computer/books • Music/instruments/speakers • Costumes/ material to make it • A variety space to present it
STEAM Components	• Science (physics and biology) • Arts • Engineering (sea-levels)

WHY	**Goals/Objectives/Targets/Aims**	• Pupils have to make a short drama (2 – 3 minutes per group) based on their topic. • Pupils learn to work in groups. • Pupils learn about global warming. • Pupils learn to present theory about global warming. • Pupils learn to connect music to emotions. • Pupils can research independently.
HOW	**Method/Activities (i.e step by step instructions for teacher)**	Step 1: Short intro from the teacher about global warming. Step 2: Divide students into groups of 4-6 student per group. Step 3: Give each group a problem specific about the topic. • What's the connection between the Industrial Revolution and global warming? • What will the icecaps look like in the future (20 years)? • What happens to the sea-levels and how does they affect countries like the Netherlands?

		• How can you prevent global warming as a citizen? Step 4: Each group must brainstorm together and do independent research. This is the end of the first lesson. If the students are not finished their work they can continue at home. Step 5: Introduction to WASO. Each group must create a series of scenes with each one telling a story. The end result should be a short drama (2-3 minutes) about their respective subjects. Step 6: Hand out paper for students to create their project on. This is an introduction to their problem. Ask these questions for the students to create the scene. • What is the problem? • Where is the problem? • Who might be affected? They have 4-5 minutes to complete this. Step 7: All groups join together and pitch their first scene. This is in order to make sure they are on the right track. Step 8: Build the characters they need in their groups and begin to include sounds/music in their scenes. • Who is the main character? • How is he/she affected by the problem? • How does he/she feel? • What sounds/music do you associate to the character? Step 9: They make scene two where there is more focus on sciences. • How does the problem work? • What is the solution to the problem? Step 10: They make scene three. • What is the end result? • What are the consequences? This is the end of lesson two. If there is time left they can begin to work on their presentations of the scenes.

		Step 11: Give the students time (10-15 minutes) to rehearse their presentations and organise costumes if necessary. Step 12: Performance Step 13: Once each group has performed the other groups give feedback (positive things and tips). They focus on: • What the performance was about? • What happened? • What was the end result? • How well have they performed?
DID IT WORK	**Reflection/Evaluation (where applicable)**	Make a quiz about the topics. The teacher makes a quiz after the second lesson based on the students' learning. The quiz is to ensure the students learned about the topic.