## **Cooperation for Science Teaching**



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## Science under Six Thinking Hats®

## #provocation#creativity#happy learning

## STH® is a method:

- Invented by Edward de Bono in the 20th century
- Based on cognitive competencies and skills of humans using just one attitude at the same time
- Learning, teaching, training, developing, problem-solving, communicating method from kindergarten age

The hats symbolise different attitudes distinguished by their colours. It is about parallel and regulated approaching...

COLOURED HAT	THINK OF	DETAILED DESCRIPTION
L	White paper	The white hat is about data and information. It is used to record information that is currently available and to identify further information that may be needed.
8	Fire and warmth	The red hat is associated with feelings, intuition, and emotion. The red hat allows people to put forward feelings without justification or prejudice.
T	Sunshine	The yellow hat is for a positive view of things. It looks for benefits in a situation. This hat encourages a positive view even in people who are always critical.
L	A stern judge	The black hat relates to caution. It is used for critical judgement. Sometimes it is easy to overuse the black hat.
L	Vegetation and rich growth	The green hat is for creative thinking and generating new ideas. This is your creative thinking cap.
	The sky and overview	The blue hat is about process control. It is used for thinking about thinking. The blue hat asks for summaries, conclusions and decisions.







STH+Science lessons +Provocation operation by objects, effects in green hat Let's begin with the white hat...

Achievable in science lessons for:

- Personal, individual and collaborative data collections of the students and teachers connected to natural sciences' topics involved in school curriculas
- Evaluation, tests, organising of infos
- Presentation and dissemination of projects, self-evaluation
- Inventing new know-hows and products due to learning based actions and movements

Blocks debate. argument and "positive" agression

"My one ambition is that around the world there should be a few more young people who come to say, 'I am a thinker.' I would be even more pleased if some of them were to go further and say:
"I am a thinker, and I enjoy thinking."

(Dr. Edward de Bono)

Empowering
Motivating
Joyfulness
Playfulness
Relaxing
Bringing into
flow
Freedom

Why? Who? For what? How much For Whom? When?

Effective work, quality -time, rational and logical issues, regulating, enforce critical and scientific thinking, developing cooperation



If you use STH®, science lessons and provocation operations together, you make science lessons the real source for developing the key competencies.