



Anlieferung



Greifer bringt Müll in den
Verbrennungsofen



Blick in den Verbrennungsofen



Dampfturbine



Generator



Verladen von Schlacke

STRATEGIES OF WASTE PREVENTION AND RESOURCE MANAGEMENT



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Before the OSOS-project:

- ❖ Schools visited a regional waste incineration plant to get to know how it is working, without having teaching material on a pedagogical background
- ❖ We worked together with the organizations to improve teaching material

During the OSOS-project:

- ❖ Schools are invited to visit a regional waste incineration plant, pupils will be taught at this location
- ❖ Schools and external partners work together to create a win-win-situation, (i) to increase their public acceptance and (ii) to bring external expertise into classrooms

What to be learned

- ❖ Students get an insight into the tasks and processes in a waste-to-energy plant.
- ❖ Students get know the possibilities of waste reduction.
- ❖ Students know the construction of a waste-to-energy plant and name technical applications of the central components and transfer them to the original object.
- ❖ Energy transformation and sustainable action are the focus of this intervention.
- ❖ Students learn the use of the waste-to—energy plant for the local society



Stations of the intervention

a) public engagement



- ❖ Students create solutions to reduce waste in small peer groups and share their ideas to the other groups, to find creative ideas to have more public engagement
- ❖ Students compare the recycling circle to the circle of life in nature

Stations of the intervention

b) ethics



- ❖ Students see the huge amount of waste people produce which can not be reused in the usual way
- ❖ Students reflect their conclusions about consumer behavior and really needed wrapping material
- ❖ Aligning research to social values of the society

Stations of the intervention

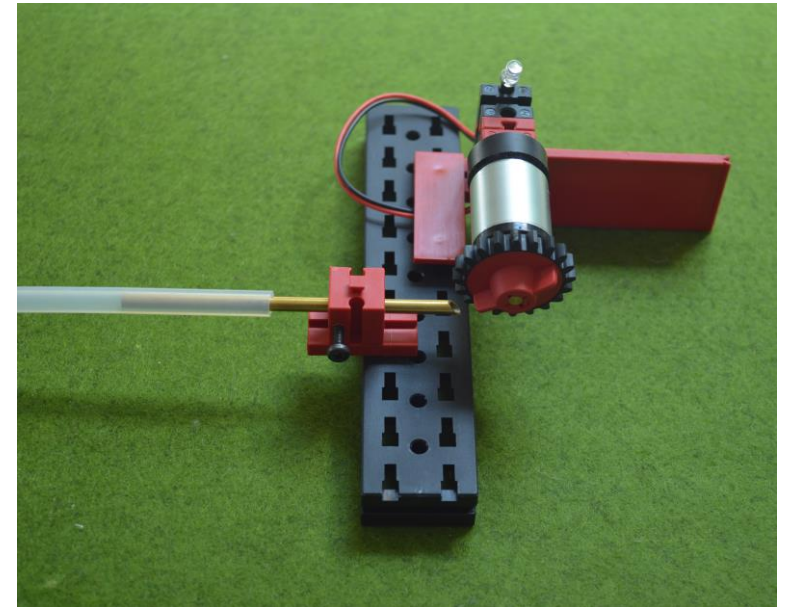
c) science education



- ❖ Students know the construction of a waste-to-energy plant and name technical applications of the central components and transfer them to the original waste powerplant.
- ❖ Connction between the subjects biology, physics
- ❖ Researchers and stakeholders work together to solve social challenges

Stations of the intervention

d) RRI



- ❖ Creating a functional model of a power plant helps to understand crucial steps in the waste-to-energy plant
- ❖ Science education and local needs are connected to RRI and present potential impacts on the environment and society

External industrial partners of the OSOS project in Bavaria, Germany

Bayern/
Deutschland

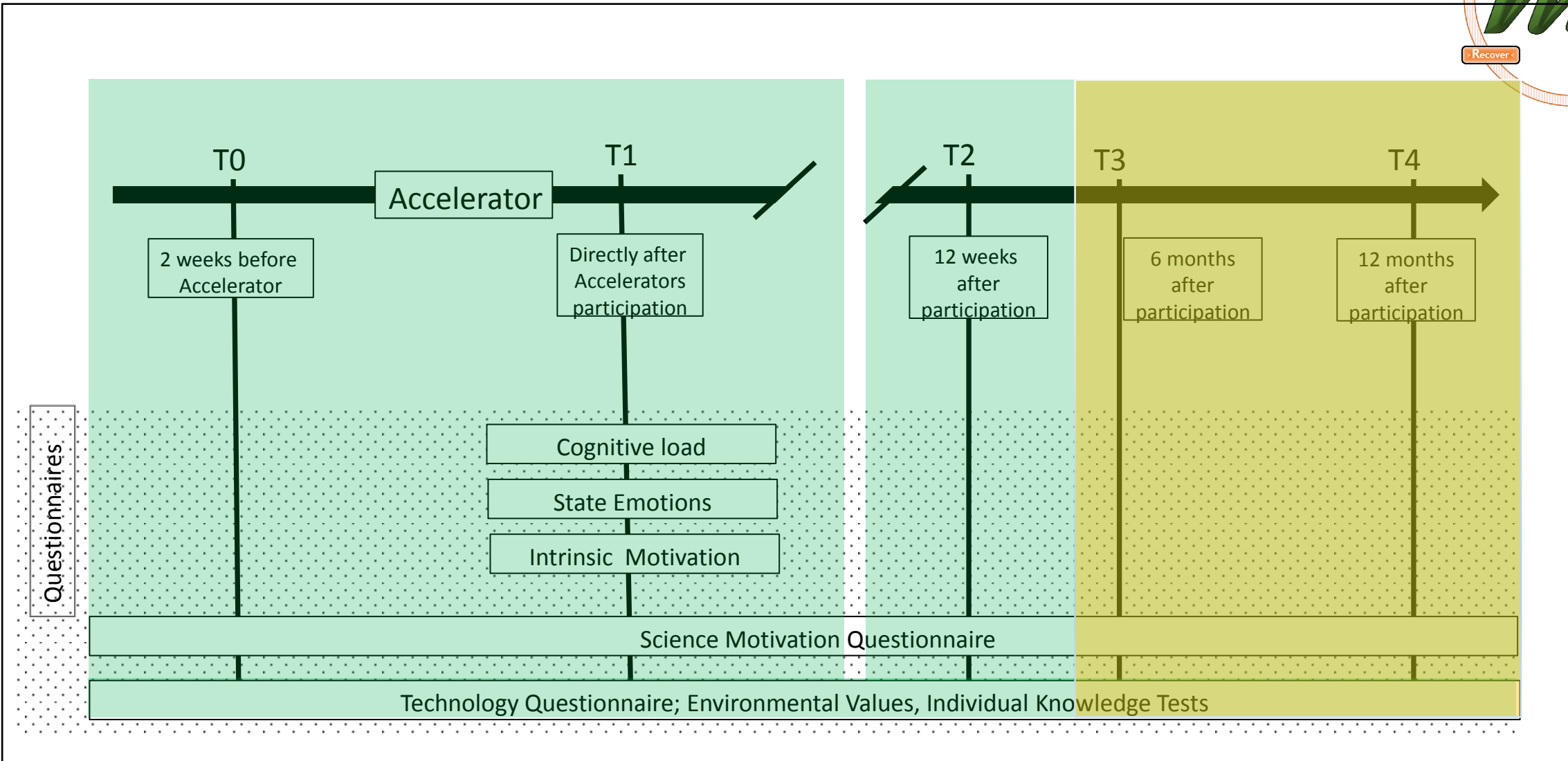
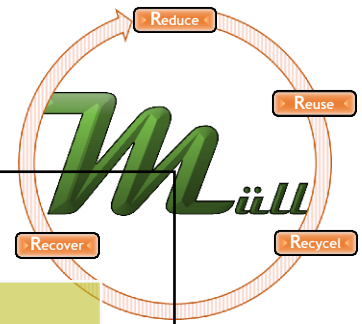
ASN in
Nürnberg

ZMS in
Schwandorf



<https://de.depositphotos.com/39337633/stock-illustration-map-of-bavaria.html>

Evaluation of the intervention



Expected participants

- ❖ 7-10 schools
- ❖ 15-20 classes
- ❖ 400 students

- ❖ Schools are required by the external partners

