

Taking back the streets

1. Name of the project:

Taking back the streets

2. Subjects covered from STEAM areas:

Technology,
Engineering,
Arts

3. Target group (age range and size of the group):

Age group: 6-10 years

4. Duration of the activity:

2 weeks

5. Key words:

- Traffic education
- proper use of technology
- GPS map
- Discussion

6. Key sentence describing context of the activity, followed by short description (200 words):

This task is designed to encourage students to ask themselves what they need to get to school, friends, and other places safely and healthily. To do this, they are given a GPS-based phone with a camera. At the beginning of the unit, they take photos of different situations on the street that they perceive as dangerous (e.g., crossing a busy street without a traffic light...). On the other hand, they also take photos of situations that they perceive as helpful, child-friendly or good for the environment. In the next step, they combine the photos and the GPS data to create a map. Based on the action product, they design alternatives (e.g. better and safer ways to reach a destination) and also formulate demands to politics (e.g. a speed limit). In this way, the students experience themselves as competent citizens and develop possibilities for political participation.

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7. Description of the activity environment, including the list of materials and tools needed:

- GPS capable device with integrated camera
- Computer/notebook to link image with GPS position and create digital map
- Map of the surroundings (in paper format, Google Earth)

8. Step by step, detailed description of the activity, including teaching and learning strategies:

Activity	Teaching strategy	Lear strategy
The pupils make a walkabout in the immediate vicinity of the school and record both positive and negative examples of traffic for themselves with the help of the camera.	Teacher explains technical device and explains safety rules	Children take pictures and check if location is linked to GPS position
The students determine a starting point and a destination on a map of their choice. They think about different routes and evaluate them.	Distance depending on age. Teacher supports and points out that there can be different ways. Points out possible danger points	Orientation in the environment, awareness of starting and ending points of a path, evaluation of alternatives.
The pupils walk along the path and take photos of prominent points		
The images are then tagged with GPS coordinates and digital maps are created	Teacher gives assistance	Students can extract GPS data from positions (from made picture)
The pupils mark dangerous points on the map and think about how these can be defused (e.g. speed sign 30).		
The students formulate appropriate demands and discuss the results.		

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9. Learning objectives/competencies:

The students orient themselves in their environment and are able to determine safe routes. They recognize dangerous situations in traffic and can react appropriately to them. They handle technology appropriately and use data to display maps. They can draw conclusions from data and appropriately create discussion bases.

10. Evaluation/Assessment guidelines:

Students can present and explain their map. They represent different routes and evaluate alternatives.

11. Lessons learned:

Similar to the cross-perspective topics of the GDSU (e.g. mobility), the STEAM approach also leaves several possibilities for linking. Thus, in this design, both technical possibilities (handling GPS camera), engineering (merging image and GPS position to a map) can be combined with aspects of aesthetics (arts - creation of maps).

12. Additional information/Links:

13. Contact person:

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