

Content

- Railroad crossing
- Railroad crossing gates

Target group

- Children ages 10 to 12
- Level: A1+/A2

Language goals

The children will be able to

- Understand a short (technical) film
- Find precise information in a text
- Expand their passive and active vocabulary
- Understand technical terminology in context
- Understand and answer simple thematic questions
- Formulate their ideas/opinions using simple language
- Use and develop learning strategies (make conjectures, reconstruct processes, correctly spell words)
- Understand and follow instructions
- Understand game instructions and actively take part in a game

Word bank

Schranke (gate), *Vorsicht!* (Caution!), *Halt!* (Stop!), *Bahnübergang* (railroad crossing), *Bahnschranke* (railroad crossing gate), *die Bahnschranke geht runter/ öffnet sich* (the railroad crossing gate goes down/opens), *Ampel* (signal), *die Ampel wechselt auf Rot* (the signal turns red), *Kreuz* (cross), *Schalter* (switch), *Autofahrer* (car driver), *Fahrradfahrer* (bicyclist), *Fußgänger* (pedestrian), *anhalten* (to stop), *warten* (to wait), *Signal* (signal), *die Signale auf Grün stellen* (to change the signal to green), *der Zug fährt vorbei* (the train passes by)

Materials

- Blackboard and chalk/whiteboard and markers
- Laptop and projector
- Audio speakers
- Magnets/blu-tack
- Envelopes
- Students' portfolios

Materials for printing and/or copying

- Photos
- *Railroad crossing* (Bahnübergang) worksheet
- Cutout template *Railroad Crossing Gate* (Bahnschranke)
- *Railroad Crossing Gate* (Bahnschranke) answer key
- My word bank sheet *Railroad Crossing Gate* (Bahnschranke)
- *Now I know* (Ich kann schon) questionnaire

Materials for download

Online games

- Der kleine ICE
<http://www.der-kleine-ice.de/bahn-kinder/kinderspiele-fahrsimulator.html>
- DB Zug Simulator
http://www.deutschebahn.com/de/nachhaltigkeit/umweltvorreiter/aktuelle_umwelthemen/15119886/online_simulator.html?start=0&itemsPerPage=10-

- Traditional games
<http://www.der-kleine-ice.de/docs/Geburtstagsideen.pdf>
- Reaction game
<http://www.games-wiki.org/wiki/Train/>

Duration

3x45 minutes

| Before the lecture/film | | |
|--------------------------------|--|--|
| Step | Content | Materials |
| 1 | <p>Instructor hangs photos of different gates on the board and writes the word "gate" in the middle.</p> <p>The children gather around the board and the instructor starts a discussion of where these gates can be found/seen: <i>parking garage, parking spot, factory grounds, road closure, forest path, railroad crossing</i>.</p> <p>Then the instructor asks: <i>What function do gates have?</i></p> <p>During the discussion he or she writes down the words "Careful!" "Stop!" on the board.</p> <p>Note: Ideally the instructor makes his or her own photos of different types of gates in the students' neighborhoods, so that they can have fun recognizing where the different gates are.</p> <p>A joint train trip or study of the topic of traffic can be the occasion for studying this lesson.</p> | <p>Photos; Blackboard and chalk/ whiteboard and markers; Magnets/blu-tack</p> |
| 2 | <p>The instructor takes the "railroad crossing" photo and fastens it apart from the other pictures.</p> <p>He or she discusses with the children what exactly can be seen in the picture: railroad crossing, railroad crossing gate, traffic light, cross, cars. The instructor writes the words around the picture on the board.</p> | <p><i>Railroad crossing</i> photo; Blackboard and chalk/ whiteboard and markers</p> |
| 3 | <p>The children return to their seats. Instructor hands out the <i>Railroad crossing (Bahnübergang)</i> worksheet and asks them to copy down what is on the board.</p> | <p><i>Railroad crossing (Bahnübergang)</i> worksheet</p> |
| 4 | <p>Instructor asks the children: <i>How do the light and the railroad crossing gate know that a train is coming? How does the light know that it should turn from yellow to red? And how does the gate know that it should be lowered?</i></p> <p>The children make guesses. Instructor suggests that they compare their guesses with the information in the film.</p> | |

| During the lecture/film | | |
|-------------------------|---|--|
| Step | Content | Materials |
| 5 | Instructor shows the first film sequence (Minute: 1:09-4:42) and asks the children to summarize what they saw and heard. | Laptop and projector; Audio speakers |
| 6 | Before watching the film a second time, the instructor hands pairs of children an envelope with sentence strips and discusses the assignment with them. | <i>Railroad crossing</i> (Bahzübergang) cutout template Envelope |
| 7 | To check their work, the instructor hands out the <i>Railroad crossing</i> (Bahzübergang) answer key and they compare their answers to the answer key. | <i>Railroad crossing</i> (Bahzübergang) answer key |
| 8 | Instructor says: <i>Now we know how the gate knows that it should be lowered. But how does it know that it can be opened again? This is shown in the next film sequence</i> (Minute: 4:42-6:12). | Laptop and projector; Audio speakers |
| 9 | After the film, the instructor and the children discuss what they saw and heard. The instructor helps, if needed, and optionally shows the sequence again. | |
| After the lecture/film | | |
| Step | Content | Materials |
| 10 | <p>Instructor suggests a game on the topic. It can be an online game, if the school has a computer lab available, or a traditional game.</p> <p>Online games:</p> <ul style="list-style-type: none"> - Der kleine ICE http://www.der-kleine-ice.de/bahn-kinder/kinderspiele-fahr-simulator.html - DB Zug Simulator http://www.deutschebahn.com/de/nachhaltigkeit/umwelt-vorreiter/aktuelle_umweltthemen/15119886/online_simulator.html?start=0&itemsPerPage=10 <p>Traditional games:</p> <ul style="list-style-type: none"> - Party games http://www.der-kleine-ice.de/docs/Geburtstagsideen.pdf - Reaction game http://www.games-wiki.org/wiki/Train/ | Computer lab (optional) |

| | | |
|----|---|--|
| 11 | <p>Instructor hands out the Word bank sheet <i>Railroad Crossing Gate (Bahnschranke)</i> to the students and they are instructed to solve the puzzle and writes the words individually into the wagons.</p> <p>Solution: The following words are on the sheet: <i>Railroad crossing gate, railroad crossing, light, signal, switch, pedestrian, driver, bicyclist, computer.</i></p> | Laptop and projector; Audio speakers |
| 12 | <p>Instructor and children end the unit with a reflection round, in which they discuss what they have learned. Each child then fills out the <i>Now I know (Ich kann schon)</i> questionnaire to find out whether they have achieved the learning objectives. Instructor also gives feedback on student performance.</p> | <i>Now I know (Ich kann schon)</i> questionnaire |
| 13 | <p>The children hold onto the following in their portfolios:</p> <ul style="list-style-type: none"> - <i>Railroad Crossing Gate (Bahnschranke)</i> worksheet - <i>Railroad Crossing Gate (Bahnschranke)</i> answer key - My word bank sheet <i>Railroad Crossing Gate (Bahnschranke)</i> - <i>Now I know (Ich kann schon)</i> questionnaire | Portfolios |

Further ideas for subject matter or CLIL teaching (natural sciences):

- Field trip project: Visit to a railroad crossing and a train station; Discussions with train station attendants.
- The work of a crossing attendants - Collect photos and information from the Internet and present the information.

Suggestion for the children at the end of the learning scenario

At the very end, the children gather around a computer or the instructor projects a computer desktop onto a screen. They look at the home page of the German Digital Kinderuniversity together. The instructor explains to the children that they now have completed the *Railroad Crossing Gate (Bahnschranke)* lecture in the *Humankind* faculty together and draws their attention to the fact that there are many more interesting lectures in this faculty and in the *Technology* and *Nature* faculties.

The instructor and the children click together on the At Home link and discover how the website works. As an example, the instructor logs in and goes to the lecture that they just worked through.

The instructor shows the children that the lecture begins with an introduction by Professor Einstein and Ms. Schlau and that their work is supported by Jowo and Christoph, the field researcher. Professor Einstein and Ms. Schlau also wrap up all the lectures and thereby frame the work on each theme.

The instructor explains to the children that they can re-watch the film at home and can even set the subtitles to German or English. That way, they can “catch” key words while watching and use these to collect points and solve three exercises and a bonus exercise on the film. The children can also get help from their parents or grandparents, from registering to solving the exercises. The whole family can have fun learning and everyone gradually becomes a professor at the Kinderuni.