Objective

- The children know how to use laser technology for navigating cars.

German language goals

- The children know adverbs for direction *(links/rechts/geradeaus)*.
- The children can give and follow directions in German (*Fahr geradeaus/Fahr nach rechts/Fahr nach links/ Stopp!/Wende!*)
- The children know German verbs to describe what a driver can do while driving with an autopilot (*essen, lesen, trinken …)*
- The children can conjugate regular verbs in the first person singular.
- The children can expand their active and passive German vocabulary (*das Auto, der Autopilot,* Adjectives such as *interessant, komisch, lustig, neu, modern, fantastisch, spannend …*).

* Although the language of instruction is English, the lesson plan sequences highlighted in orange are taught in German.

Materials

- Toy cars
- Laptop and projector
- Audio speakers
- Magnets
- Whiteboard markers/chalk
- *Laser scanner (Laserscanner)* photo
- *Directions (Richtungsanweisungen)* word cards
- Blindfolds
- *Autopilot (Autopilot)* worksheet
- "My word bank sheet: *Autopilot (Autopilot)*"
- Portfolios

Time	Social Form	Learning Objective	Content	Materials
5 min	Group work	The children can name body parts in German. The children can use the structures: *Das ist mein/meine … Das sind meine …*	The instructor welcomes the children to today's lecture and invites them to form a circle. The instructor points to a body part, and the children name the body part in German using the structures: *Das ist mein/meine … Das sind meine ….* The instructor models the activity two more times, then divides the children into groups of four. One group member points to a body part, and the other group members name the body part in German using the structures: *Das ist mein/meine … Das sind meine ….* The instructor supports the children with the vocabulary and pronunciation.	

Time	Social Form	Learning Objective	Content	Materials
5 min	Interactive classroom dialogue	The children know what an autopilot is. The children know the words *das Auto* and *der Autopilot,* and can pronounce them correctly.	After three minutes, the instructor invites the children to return to their seats. The instructor shows a toy car and asks: *What is this?* The children respond. The instructor introduces the German word *das Auto* and writes it on the board. The children repeat to practice their pronunciation. The instructor continues: *What body parts do I need to steer a car?* The children reply. The instructor asks: *Do I always need my hands while steering a car?* The children share their ideas and may or may not mention an autopilot. In either case, the instructor writes the word *autopilot* and the German word *der Autopilot* on the board, pointing out the similarity in how the two words are written and the difference in pronunciation. The children think about what the word might mean. After a round of guessing, the instructor writes *automat + pilot* under the word on the board and explains: *An autopilot is a computer that automatically steers vehicles without the driver having to do anything.* The instructor asks if the children recognize this from any other context, for example flying, computer games, or driving cars.	Whiteboard markers/chalk One toy car

Time	Social Form	Learning Objective	Content	Materials
5 min	Interactive classroom dialogue	The children know the German adjectives *interessant, komisch, lustig, neu, modern, fantastisch, spannend* and can pronounce them correctly. The children can express their opinion with basic German words. They know that a laser scanner and a computer are needed to steer a car with an autopilot.	The instructor says: *Let's watch a video and see what happens when an autopilot instead of a driver steers a car* (minute 1:32 to 2:55). After watching the first sequence of the video the instructor asks: *What do you think about this?* The children collect adjectives: *interesting, strange, funny, new, modern, fantastic, exciting*, etc. The instructor writes the words on the board and introduces the German words *interessant, komisch, lustig, neu, modern, fantastisch, spannend*. The children repeat the words. The instructor asks: *Did you understand how this system works?* The children explain what they understood and come to a conclusion (with the instructor's help, if necessary): with a laser. The instructor says: *That's correct. So all you need is a car, a computer, and a laser scanner on the roof of the car.*	Laptop and projector Audio speakers

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Time	Social Form	Learning Objective	Content	Materials
5 min	Interactive classroom dialogue	The children know how to use laser technology for navigating cars.	The instructor shows the next part of the video (minute 2:55-3:56) and the children test out their conclusion. The instructor says: *We just saw two experiments. Can we recreate the first experiment?* One child pretends to be a pedestrian on the street, and another pretends to be the car, imitating a laser scanner on their head with their hands. The instructor uses movement and pantomime to give instructions on how the car should drive and how the pedestrian should act. Car: start moving, go faster and faster, drive very fast, then stop. Pedestrian: stand calmly, show fear (as the car gets closer and closer), wipe sweat from your forehead (when the car stops). Now the instructor divides the children into two groups. One group plays the car with the laser scanner on their head, and the other group plays the pedestrian.	Laptop and projector Audio speakers

Time	Social Form	Learning Objective	Content	Materials
5 min	Interactive classroom dialogue	The children know how to use laser technology to navigate cars.	The instructor puts a photo of a laser scanner on the board and writes "laser scanner" underneath. The instructor draws red laser beams coming from the laser scanner and writes "laser beams" underneath, then invites the children to watch the third part of the video (minute 3:56-6:30) to learn how laser beams work. After watching the third part of the video, the instructor and the children discuss the answer.	Laptop and projector Audio speakers *Laser scanner (Laserscanner)* photo Magnets

Time	Social Form	Learning Objective	Content	Materials
5 min	Interactive classroom dialogue	The children know adverbs of direction (*links/rechts/geradeaus*). The children can understand and follow directions in German (*Fahr geradeaus/ Fahr nach rechts/ Fahr nach links/ Stopp!/Wende!*).	The instructor hands out toy cars to the children and explains: *Let's learn how to give driving directions in German*. The instructor says: *Fahr geradeaus* and puts the sentence on the board. The instructor moves the car straight ahead to emphasize the meaning of the sentence. The instructor repeats the sentence and encourages the children to do the same while moving their cars straight ahead. The instructor says: *Stop* and puts the word on the board. The instructor stops the car, then repeats the sentence and encourages the children to do the same while stopping their cars. The instructor follows the same pattern for the sentences *Fahr nach links./Fahr nach rechts./Wende!* The instructor then continues giving directions until the children can follow them confidently.	Toy cars Magnets *Directions (Richtungsanweisungen)* word cards

Time	Social Form	Learning Objective	Content	Materials
10 min	Partner work	The children can give and follow directions in German (*Fahr geradeaus/Fahr nach rechts/Fahr nach links/Stopp!/ Wende!*).	The instructor divides the children into pairs, then says*: Let's imagine we are cars. One partner is the autopilot and is navigating the car in German. The other partner is the car and is following the directions. To make it more difficult, the partner driving the car will wear a blindfold so they have to listen very carefully to the directions. Who wants to demonstrate the task with me?* The instructor demonstrates the task with one volunteer. The children complete the task, and the instructor supports them, if necessary. After a few minutes the children switch roles. <u>Note:</u> Children do not have to wear a blindfold if they feel uncomfortable doing so. They can complete the task without a blindfold.	Blindfolds
5 min	Individual work	The children can give basic directions in German.	The instructor asks the children to return to their seats, points to a toy car, and says: *Let's write down these directions in the computer of our car, so the car will be able to navigate us in German.* The instructor hands out the *Autopilot* worksheet and invites the children to write down the sentences from the board and add drawings to them. The children complete the task, and the instructor helps them, if necessary.	*Autopilot (Autopilot)* worksheet

Time	Social Form	Learning Objective	Content	Materials
5 min	Interactive classroom dialogue	The children know German verbs to describe what a driver can do while driving with an autopilot (*essen, lesen, trinken …*). The children can conjugate regular verbs in the first person singular.	The instructor asks the children to return to their seats and asks them to close their eyes for a moment to imagine the following: *You're sitting in your car. Of course it has a laser scanner, so you don't need to steer. What do you do instead?* The children collect ideas: *I sleep, I study, I eat, …* The instructor translates the words into German and writes them on the board. The children repeat them. The instructor invites the children to watch the last part of the video (minute 6:30-7:03). After watching the last part, the children compare what the driver is doing in the film with their ideas. They add more verbs to their list on the board, if necessary.\newline Note: If there is enough time, the instructor explains how to build small sentences with the verbs. The instructor writes *Ich* on the board and adds one of the verbs from the list (e.g. *essen*). The instructor crosses out the -n (*essen*) to demonstrate how to use regular verbs in the first person singular. The instructor provides two more examples. The instructor invites the children to work with a partner. The children build small sentences with the verbs on the board.	Whiteboard markers/chalk

Time	Social Form	Learning Objective	Content	Materials
5 min	Interactive classroom dialogue	The children can reflect on what they learned in today's lesson and repeat the German words they learned today.	The instructor and the children end the unit with a reflection round in which they discuss what they learned. The instructor encourages the children to repeat the German words from the lesson. Each child then fills out "My word bank sheet: *Autopilot (Autopilot)*" for this lecture and writes down the German words and chunks they learned in today's lesson.	"My word bank sheet: *Autopilot (Autopilot)*"
3 min	Interactive classroom dialogue	The children know how they can continue working on the topic.	The instructor encourages the children to complete the online tasks for this lecture at home. The instructor previews the topic of the next lesson and ends the lesson. The children file today's materials in their portfolios.	Portfolios Worksheets