

AUSTRALIAN CURRICULUM: GERMAN CLIL UNIT PLANNER

SEQUENCE: F-10

YEAR LEVEL/BAND: 9-10

UNIT: JUNIOR UNIVERSITÄT

LECTURE: SUPRATRANS



Please note

These resources are designed to be implemented optimally with a focus on the content knowledge as well as language. CLIL is flexible; however, to enable the learning of new content and/or skills through the target language some code switching between the students' first language and the target language might be required. Assessment may be in the form of observation, conversation or a product.

Focus Questions: How does a magnetic suspension railway work? How do magnets and magnetic levitation work? How might the future of transport in Australia and Germany look if we had superconductor powered vehicles?

Concepts: chemical processes that enable suspension, the components and functions of a magnetic suspension experimental vehicle.

Communication	Content
Communicating - Socialising (ACLGEC172) shared activities- persuading, arguing, planning, negotiating Communicating - Informing (ACLGEC175) convey ideas, information and views - presenting, representing, reporting Understanding - Systems of Language (ACLGEU183) vocab and grammatical structures - future, imperative, relative pronouns	Science: How do magnets and magnetic levitation work? (ACSSU182) What are the properties of cryostat and nitrogen and how do they work in the superconductor? (ACSSU179) History: Research the history of superconductor technology: http://cesur.en.ankara.edu.tr/history-of-superconductors/ (ACDSEH086)
Cognition	 Economics and Business: Which companies around the world are already investing in the technology applying superconductors for automobiles? How might we be dependent on them in the future? (ACHEKO39)
Communicating - Reflecting (ACLGEC180) make choices - assumptions, questions, modifying behaviour, responsibility Understanding - Systems of Language (ACLGEU184) describe the interrelationship between text types, structuring, language choice Culture	 General Capabilities Critical and Creative Thinking: How might the future of transport in Australia and Germany look if we had superconductor powered vehicles? Are there any problems with the rules that already exist for this technology? Personal and Social Capability: Would you feel safe travelling in one of these vehicles - why or why not?
Communicating - Reflecting (ACLGEC181) own identity, exploring, explaining, cultural mediator Communicating - Informing (ACLGEC174) context and culture affect information - perspectives, researching, synthesising, evaluating, representing	Cross-Curriculum Priorities Sustainability: How do superconductor powered cars compare with electric powered vehicles in terms of maintaining a sustainable future? (OI.8)

Aspects of the 9-10 Band Achievement Standard being addressed through this Lecture: Suggested aspects of the Achievement Standard for the proposed Assessment Tasks are noted numerically on the following page next to each task. A full listing of all aspects of the Achievement Standard is to be found on the final page, noting that the numbering system is not from ACARA, but rather developed for the purpose of presenting this series of Unit Planners.

	Student Tasks	Language Assessment Tasks		Materials and Resources	
	Facilitating Communication - of, for, through learning	Formative: Schreiben A1/A2: AB 3.1 Der Traum vom Schweben A2/B1: AB 3.1 Der Traum vom Schweben Formative: Zuhören/Lesen/Schreiben	4, 6, 7 4, 6, 7, 8, 10	Materials: • magnets • tablets (one per two students) Resources:	
	 Answer multiple choice questions. Read and understand texts about the experimental vehicle. Complete a fill in the blank task. 	A1/A2: AB 3.2 Was ist richtig? A2/B1: AB 3.2 Ein schwebendes Fahrzeug	6, 7 6, 7, 8	Students logged in to the Junioruni website to access the exercises or print a copy of the exercises to complete	
Implementation	Locate and understand technical terms. Describe the experimental setup in their own words. Analysing Key Content Understand the content of a technical video. How a superconductor is constructed and how it functions. To be able to name the components of a superconductor. The chemical processes that enable suspension. Opportunities for Cognition Reflect on their learning. Understand systems of language e.g. grammatical aspects: present, passive and future tenses, conjunctions of time. Understand the text type of an explanatory/informative text. Can transfer their knowledge of how superconductors work correctly to another	Formative: Lesen/ Zuordnen/ Zuhören/ Schreiben A1/A2: AB 3.3 Warum schwebt das Fahrzeug? A2/B1: AB 3.3 Wie wird aus einer Bahn ein Supratrans?	6, 7, 8 6, 7, 8	 before/during and after watching the video as a class. Access to digital or hardcopy dictionaries is ideal for some activities 	
		Summative: Schreiben/Sprechen Ein Podcast: How might the future of transport in Australia and Germany look if we had superconductor powered vehicles? Script and record your own podcast using your research and differing attitudes (pros and cons) as a foundation and to listen to peers' podcasts. NOTE: at this level, research and discussion can be in L1, not necessarily in German. Inquiry Based: Students select an area of interest around the concept of Supratrans (see Content Focus above for further ideas) and present their findings to the class, year level, school community	1, 3, 4, 5, 6, 7, 10, 18 1, 3, 4, 5, 6, 7, 10, 12, 15, 16, 17	Additional Teacher Resources: Handbook, attachments and video script are available for pdf download from the teacher's version of the website. Materials for download: Supraleitende Eisenbahn: https://www.physik.uni- bielefeld.de/eventphysik/index.php/de/versuch e/elektrodynamik/supraleitende- eisenbahn.html Supraleitung: https://www.physik.uzh.ch/groups/schilling/sup	
	vehicle. Connecting with Culture Understand elements of culture relating to the lecture. April 1st- April! April! The history of superconductors	or wider audience. Hands on tasks: Interested students could investigate other forms of transport using robots in the Goethe Materials: Lego Mindstorms https://www.goethe.de/ins/au/en/spr/unt/kum/cli/cli/ste/rob.html		ra.html	

Lecture:	Achievement	:hievement How I see myself:		elf:	How my teacher sees me:		
Supratrans	Standard	I know this	I know this	I still need to	You know this	You know this	You still need
Observational Assessment		in German.	in English.	work on this.	in German.	in English.	to work on this.
I can • engage and sustain interactions with peers in class, group and paired activities	1, 2, 5						
 understand what is being said in German on the video. 	6, 7, 8, 11						
describe the visionary image of a hovering train.	7, 8						
answer multiple choice questions.	6						
complete a fill in the blank task.	4, 10, 12						
read and understand texts about the experimental vehicle.	6						
 locate and understand technical terms. 	6						
describe the experimental setup in my own words.	6, 7, 10						
 reflect on my learning. 	13, 18						
 understand systems of language e.g. grammatical aspects: present, passive and future tenses, conjunctions of time. 	4, 11, 15						
understand the text type of an explanatory/ informative text.	16, 17						
 transfer my knowledge of how superconductors work correctly to another vehicle. 	6, 10						
 understand elements of culture relating to the lecture. 	13, 14, 17, 18						
 undertake an extended written/spoken task on the topic of Supratrans. 	1, 3, 4, 5, 7, 9, 10, 12						
 understand the applied content of a technical video. 	Science- (ACSSU179), (ACSSU182), (ACSHE158)						

Overall Assessment

Well Above Standard Above Standard		At Standard	Below Standard	Well Below Standard
Α	В	С	D	E
The student can complete all of the challenges above in German with minimal English to help explain content, displaying excellent cognitive, communicative and creative skills.	The student can complete all of the challenges above in German with some English to help explain content, displaying above average cognitive, communicative and creative skills.	The student can complete most of the challenges above in English with some German words and phrases, displaying sound cognitive, communicative and creative skills.	·	The student can complete little or none of the challenges above in English, displaying limited cognitive, communicative and creative skills.

Australian Curriculum: German 9-10 Band Achievement Standard (F-10 Sequence)

- 1. Students use written and spoken German to initiate and sustain interactions with teachers, peers and others in a range of settings and for a range of purposes.
- 2. Students use language spontaneously in the classroom environment to seek clarification and advice, assist others, initiate conversations and discussions, debate a course of action, share learning strategies and comment on the contribution of others.
- 3. Students describe plans and aspirations using future tense.
- 4. Students state facts and relate experiences, using past tense forms and regular and irregular verbs.
- 5. When speaking, students use appropriate pronunciation, intonation and stress in a range of sentence types, including variations such as contractions.
- 6. Students locate, synthesise and evaluate information on local and global issues from a range of perspectives and sources.
- 7. Students present ideas, information and views in a range of texts selected to suit audience, purpose and context.
- 8. Students analyse the main ideas and themes in imaginative texts and use evidence to support their views.
- 9. Students plan, draft and present imaginative texts using literary devices (imagery, similes, onomatopoeia) to engage a range of audiences.
- 10. When creating informative, persuasive and imaginative texts, students use a variety of conjunctions, relative clauses and other cohesive devices to build cohesion.
- 11. Students specify and describe people, places and objects by applying knowledge of the case system to articles, common demonstratives and possessives followed by adjectives.
- 12. Students interpret and/or translate excerpts from German texts, identifying and explaining culture-specific aspects, and create texts that reflect and explain aspects of culture and language for different German-speaking and Australian audiences.
- 13. Students identify and challenge their own assumptions and take responsibility for modifying language and behaviours in relation to different cultural perspectives.
- 14. Students identify ways that language influences people's actions, values and beliefs, and appreciate the scale and importance of linguistic diversity.
- 15. Students explain the roles of different German cases (nominative, accusative, dative and genitive) and tenses, and variations in spoken and written German in relation to pronunciation, spelling and punctuation.
- 16. Students explain the relationship between text type, audience and purpose.
- 17. Students identify the role culture plays in the creation and interpretation of texts, and explain how language and text features (layout, structure and formal/informal register) are used differently in a range of texts.
- 18. Students explain ways in which language and culture are interrelated and influence each other.