

AUSTRALIAN CURRICULUM: GERMAN CLIL UNIT PLANNER

SEQUENCE: F-10

YEAR LEVEL/BAND: 9-10

UNIT: JUNIORUNI

LECTURE: ALGEN



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: Can energy be obtained from algae? What are the ideal conditions for algae to grow? In what ways are we morally obligated as a country to reduce our carbon emissions?

Concepts: over-fertilisation, ideal growing conditions, sustainable fuel consumption and production

Communication	Content			
Communicating - Socialising (ACLGEC171) interactions - formal, informal, past, future, opinions, advice Communicating - Informing (ACLGEC175) convey ideas, information and views - presenting, representing, reporting Understanding - Systems of Language (ACLGEU183) vocab and grammatical structures - future, imperative, relative pronouns Cognition	 Learning Areas Mathematics: Use a graph to track the progress of algae growth in an experiment. Can you make predictions and describe your data with your calculations? (ACMSP283) Science: Investigate further the conditions to grow life including seasonal changes (ACSSU176). Geography: Find out more about the blue-green algae problem in the Murray-Darling Basin: https://www.mdba.gov.au/issues-murray-darling-basin/blue-green-algae Civics and Citizenship: How can you encourage people in your local area to keep waterways free of over-fertilisation? 			
Communicating- Socialising (ACLGEC173) describe and reflect experience of learning and using German Communicating - Reflecting (ACLGEC180) make choices - assumptions, questions, modifying behaviour, responsibility Understanding - Systems of Language (ACLGEU184) describe the interrelationship between text types, structuring, language choice	Critical and Creative Thinking: What are some other ways that we could use naturally occurring phenomena to power vehicles? Ethical Understanding: In what ways are we morally obligated as a country to reduce our carbon emissions?			
Communicating- Informing (ACLGEC174) context and culture affect information - perspectives, researching, synthesising, evaluating, representing	Aboriginal and Torres Strait Islander Histories and Cultures: (OL5)- Find out more about The Narungga Nation Aboriginal Corporation (NNAC) and their commercial seaweed farm off of the York Peninsula: https://www.premier.sa.gov.au/news/media-releases/news/first-algae-aquaculture-lease-granted-off-the-yorke-peninsula Sustainability: Investigate further into the reduction of coal fired power plants in Germany. How does this compare with Australia's commitment to greenhouse gas emission reduction? (OL8)			

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	
Implementation	Facilitating Communication - of, for, through learning	Formative: Lesen/Schreiben A1/A2: AB 1.1 Algenzucht im Wasserglas A2/B1: AB 1.1 Algenforschung	4, 6, 7, 8, 10, 11 3, 4, 7	Materials: A1/A2 Experiment- Algen im Wasserglas 2 bottles with screw top Water from a pond
	 Understand a text on the topic of algae research for energy production. Understand an animation on the topic of 'over fertilisation' and answer questions. Follow the directions to grow algae in a glass and experiment with different environmental conditions. Describe pictures. Analysing Key Content Understand the applied content of a technical video: where algae occurs; under what conditions algae grows best; how algae are over fertilised; name and describe the growth conditions of algae; describe the laboratory processes involved in the production of algae propellant. Opportunities for Cognition Understand the problem of over fertilisation. Define a research question. Understand systems of language e.g. grammatical aspects: processual passive, modal verbs, perfect tense. Reflect on their learning. Connecting with Culture Understand elements of culture relating to the lecture: Places in Germany with ponds. Coal power plants that are dying out. 	Formative: Lesen/ Zuordnen/Schreiben A1/A2: AB 1.2 Algenforschung A2/B1: AB 1.2 Im Algenlabor	1, 2, 3, 4, 7 4, 6, 7, 12	 2-4ml liquid fertilizer Resources: Students logged in to the Junioruni website to access the exercises or print a
		Formative: Lesen/ Zuordnen A1/A2: AB 1.3 Von der Alge im Dorfteich zum Biotreibstoff A2/B1: AB 1.3 Algenblüte	4, 6 4, 6, 7, 10	copy of the exercises to complete before/during and after watching the video as a class. • Access to digital or hardcopy dictionaries
		Formative: Zuhören/ Lesen/ Schreiben A2/B1: AB 1.4 Lebensraum Teich: Überdüngung	4, 6, 7, 10, 11, 12	is ideal for some activities Additional Teacher Resources:
		Summative: Schreiben/ Sprechen Create your own time lapse or interactive video documenting a longitudinal study of water sources in your local area. How does the production of algae change over the seasons and under different conditions?	1, 3, 4, 5, 7, 9, 10	Handbook, attachments and video script are available for pdf download from the teacher's version of the website. Materials for download:
		Inquiry Based: Students select an area of interest around the concept of Algen (see Content Focus above for further ideas) and present their findings to the class, year level, school community or wider audience. Hands-on Tasks: Further experiments into growing algae: https://www.education.com/science-fair/article/growing-algae/	1, 3, 4, 5, 6, 7, 10, 12, 15, 16, 17	Animation film: https://www.planet- schule.de/mm/lebensraum/teich- ueberduengung/ Multimedia: https://www.planet-schule.de/sf/multimedia- interaktive-animationen- detail.php?projekt=gewaesser-ueberduengung

Lecture:	Achievement	Н	ow I see myse	lf:	How	my teacher see	s me:
Algen	Standard	I know this in	I know this	I still need to	You know this	You know this	You still need
Observational Assessment		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						
 understand and name the ideal conditions for the growth of algae. 	1, 2, 6						
 Ask and answer questions about algae growth and breeding. 	1, 6						
 understand a text on the topic of algae research for energy production. 	6						
 understand an animation on the topic of 'over fertilisation' and answer questions. 	1, 4, 6, 7						
 follow the directions to grow algae in a glass and experiment with different environmental conditions. 	2,6						
describe pictures.	1, 6, 7						
reflect on my learning.	13, 18						
 understand systems of language e.g. grammatical aspects: processual passive, modal verbs, perfect tense. 	4, 11, 15						
 understand the text type of an experiment (procedure). 	16, 17						
 understand elements of culture relating to the lecture. 	13, 14, 17, 18						
 understand the applied content of a technical video. 	Science (ACSSU175, ACSSU176)						

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	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.