

TEACHING SDGs

Fachdidaktik 1

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1 GENERAL INFORMATION

»» BACKGROUND

The following four lessons represent an approach for teaching the SDGs to students. Major focus of the lessons will be the “Life Lech Project” which was initiated by the EU-founded Natura 2000 project that follows the agenda of recreating and revitalizing areas around Europe worth protecting. The Natura 2000 project started in 2001 and lasted until 2007. Yet, the EU supported several follow-up projects like the “Life Lech Project”. The river *Lech* is, alongside with the *Tagliamento* in Italy, the only flowing water system that has mostly been untouched by anthropological impacts. Hence, these rivers provide vital habitats for life under water of all kinds and display ecological balances that can hardly be found anywhere else in Europe. As part of my Biology studies, I was allowed to participate actively in a symposium of the “Life Lech Project” where protection measures were evaluated and revitalization of selected river areas was monitored. During this three-day symposium, I got to meet different scientists, activists, critics and residents of the surrounding villages and I was touched by the speeches and discussions. I was not aware how emotionally charged the dialogue between humans and nature can be. The river *Lech* in all its genuineness was also a threat to the surrounding villages. Due to its natural purity, water masses could float unimpededly and in case of high precipitations, floods and mud streams threatened nearby residences. Combining human needs and obtaining the genuineness of our world poses a problem that my future students will also have to face. This was the main reason why I chose to discuss the SDGs in combination with the “Life Lech Project”. As I had the opportunity to study English, Biology and now Music on a teacher’s degree I planned an interdisciplinary project. This is the reason why I chose to incorporate the SDGs in all three subjects.

»» ADDITIONAL THOUGHT

It might not generally be the case that teachers can educate students in English, Biology and Music. Hence, it would be possible to mobilise other teachers of your school and create an interdisciplinary project with the help of your colleagues.

»» AGE AND LEVEL

These lessons target students between the age of 16 to 17. They attend the third grade of higher secondary school which means that those students have one year left to finish their A-levels. The four lessons are not restricted to a specific school type like the Austrian “Gymnasium”. However, it would be beneficial if students enrolled in a school branch where Biology or Music are taught extensively. Students at this age will already have gained



thorough proficiency in the English language (level B1 or some even B2) and will be familiar with principles of Biology like Ecology, water cycles and consumption. Depending on the chosen specialization area, students know how to read musical notation and the majority of students might play an instrument. In any case, students should be used to sing basic pop songs in a choir. It would be beneficial if students were already aware of the SDGs and the goals involved. In this case I assume that my students already know about the SDGs in general. These lessons approach a practical implementation of the "theory".

CULTURAL CONTEXT



The majority of students will be born in Tyrol and their mother tongue will be German. Some students might have grown up bilingually and speak, e.g. Turkish or Arabic, but all of them will speak some form of Tyrolean dialect or other variety. Depending on the location of the school, learners will have a different social background. While some students might be born in a rural area, others might come from the city. The lessons will be applicable for all different cultural backgrounds or origins. Yet, in this specific case, I will focus on students who are born in a more rural area as I would like to focus on different forms of dialects to show students how versatile languages, especially their own language, can be.



2 LESSON PLANS


1st LESSON: English

Themes:

- Introducing the issue of what a natural river is
- Introducing the SDG 14

Time	Phase	Content	Method	Goals	Media, Material
20'	Warm up	<p>"What does a natural river look like?" Asking students to draw their image of a natural, "healthy" river.</p> <p>Students should take their time and draw their image of a natural river on a piece of paper. They should then get together in pairs, talk about their drawings, and lastly talk about it in plenum.</p> <p>Resolution: Confronting students with the fact that natural rivers do not always look neat and tidy. Also see NOTE 1</p>	Think-Pair-Share	<p>Raising awareness of what rivers actually look like in Tyrol.</p> <p>Students engage in a vivid discussion in the target language.</p>	<p>Pieces of paper Colours</p>
10'	Vocabulary Revision	<p>We will revise some of the grammar which is necessary when talking about rivers and the ecosystem.</p>	Plenum	<p>Students can draw back on useful vocabulary.</p> <p>Students are able to use specific terminology correctly.</p>	<p>Blackboard</p> <p>Vocabulary: river bank, meandering, Amazon, sap green, natural flow, arisen in..., river system,</p>




					aquatic, organisms, species, sustainable, goal, development
20'	<p>Introduction of the SDG life below water</p> 	<p>I will explain a short story about my time at university to raise the issue that the river "Inn" is spoiled by human influence. NOTE 2</p> <p>Show students video of the SDG 14 and ask them what that could have to do with the rivers here in Tyrol and what we could do to increase the sustainability of our river systems. https://www.youtube.com/watch?v=pBn8ZCQvFoo</p> <p>Students will summarize their findings and ideas on the picture they created earlier.</p>	<p>Short teacher speech</p> <p>Pair work</p>	<p>Students get to know me as a teacher and that I was also surprised about the bad condition of the river "Inn".</p> <p>Students can apply the SDGs to problems that need to be dealt with in their own country.</p>	<p>Notes for the short speech/story.</p> <p>Projector, PC</p>
5'	Cool down	The students are asked to imagine one river or one spot on earth that they would like to preserve for future generations. It can be in a foreign country or here in Austria.			



2nd LESSON: Biology

Themes:

- Roleplay based on facts
- Introducing the SDGs


Time	Phase	Content	Method	Goals	Media, Material
10'	Warm up	<p>Students are asked to think about when they used water today. They are asked to make notes and get together with a partner to talk about their findings.</p> <p>Students will watch a video about water consumption https://www.youtube.com/watch?v=On9WRrFHVjY</p>	Think-Pair-Share	Raising awareness of how much water is consumed per day.	Piece of paper Colours Projector
40'	Roleplay	<p>Students are asked to do a roleplay. Students mentioned earlier for which areas of life we need water. Hence, we will have different roles:</p> <ul style="list-style-type: none"> - Farmer - Activist - Politician - Entrepreneur 	Plenum	<p>Students empathise with different roles and try to understand different opinions.</p> <p>Students understand how difficult it is to find a holistic solution.</p>	Teacher functions as a moderator and tries to keep the discussion professional
5'	Video	Video about the SDGs in Africa. Show students the example of how important it is to find holistic solutions for everyone. We cannot put one SDG into practice while ignoring others.	Plenum	Raising awareness that SDGs cannot be implemented easily. The balance and sustainability is of importance.	Projector
5'	Cool down	The learners are asked to think about how they can save water for the rest of the day.			



3rd LESSON: Music

Themes:

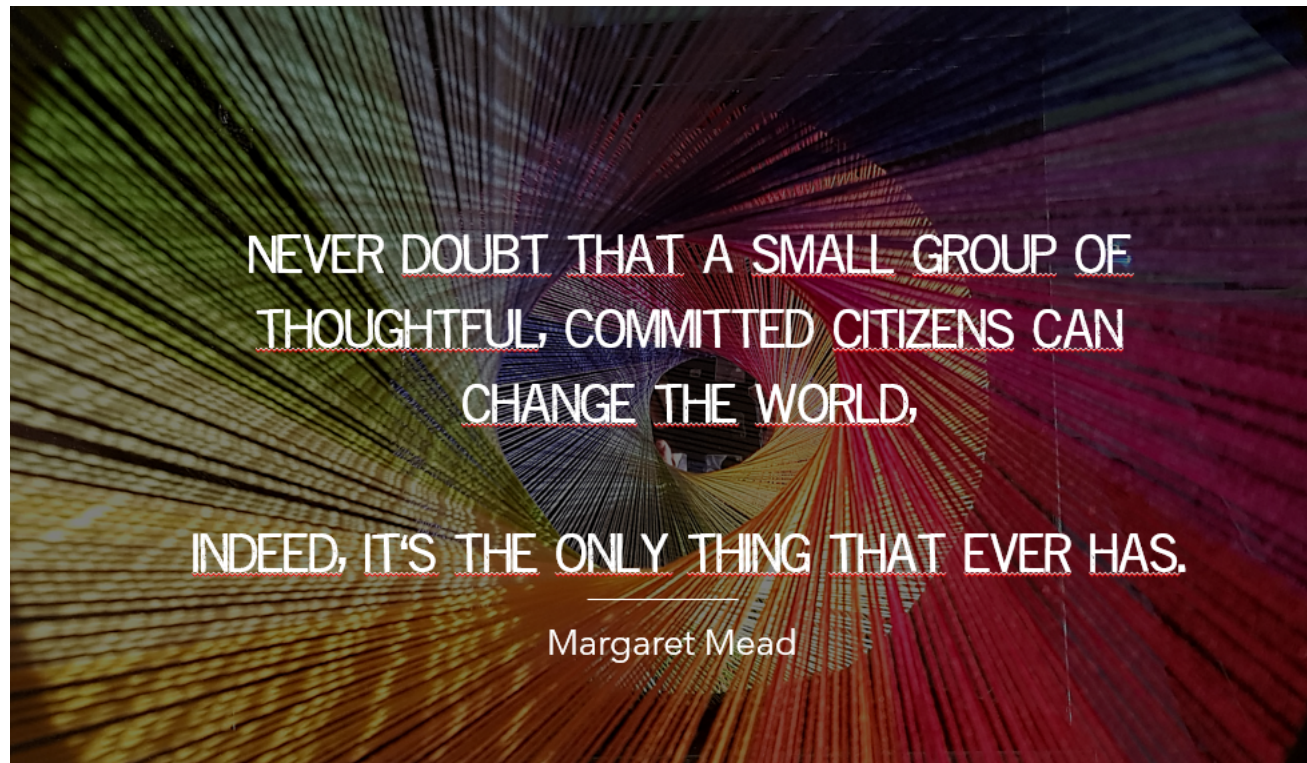
- Songwriting
- Implementing the SDGs

Time	Phase	Content	Method	Goals	Media, Material
10'	Warm up	Circle Groove: September from "Earth, Wind and Fire" NOTE 3	Plenum	Students are more awake afterwards and motivated.	Much space
---'	Song analysis Song writing	<p>Listen to the song "Haschrek im Lechl" by Bluatschink https://www.youtube.com/watch?v=xG17K8xIE68&t=218s</p> <p>Analyse the text and ask students to translate some of the words. To make it easier for the students we will split the song up. Each group will deal with one verse only.</p> <p>Later the students are asked to translate some words of the text into their own language or dialect (subtitles are included in the Youtube video).</p> <p>This will take several sessions and could possibly be continued in other (also different) subjects.</p> <p>Later we will start singing the song and finalizing the lyrics. Preparation for the final performance will begin.</p>	<p>Workgroups</p> 	<p>Implement sensitivity for multilingualism/language diversity in the classrooms.</p> <p>Appreciation for all different dialects and languages.</p> <p>Students need to analyse rhythm patterns.</p>	<p>Projector Lyrics</p> <p>Piano or guitar</p>



4th LESSON: Music

This will be the day of the performance. This will be sort of an appreciation for the students for their hard work! We try to reach as many people as possible. Our goal is to let people know what the SDGs are and how we can implement them here in Tyrol.





NOTE 1

When thinking of a natural river, most people think of this:



<https://www.collinsdictionary.com/de/worterbuch/englisch/river>

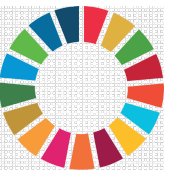
But actually, especially in Tyrol, natural rivers look like this:



https://austria-forum.org/af/Heimatlexikon/Der_Lech

NOTE 2

The moment I realised that the “natural” river Inn was not that natural at all was when I had to do a field trip for my Biology studies. The course I enrolled in at university was called “Indigenous habitats of aquatic organisms”. For this course, I was assigned to check a nearby river, in my case the river Inn, for any signs of life of organisms that live in the floating water. I brought a fine meshed dip net, a magnifier – you need to know that these animals are incredibly tiny – and many petri dishes in which I planned to preserve my discoveries. Armed with my Biology equipment I stood at a riverbank, reversing every stone and scanning the water for life for approximately two hours. Did I already mention that I enrolled in the winter course? It was around minus 5 degrees and despite fingers like icicles and a bag full of plastic I had found no signs of life – nothing.



On the next day, we were asked to bring our findings into the laboratory for a thorough species determination. Unfortunately, I had to go there blank. As I tried to explain the reasons for the failed mission, the professor interrupted me with a prosaic smile and said: "No wonder that you weren't successful - the river Inn is dead!"

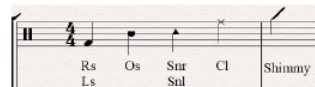


NOTE 3

Circle Groove

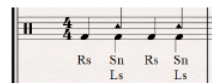
September

Legende



R _s / L _s	Rechts oder links stampfen
O _s	auf Oberschenkel klatschen
Snr/Snl	Schnippen rechts/links
Cl	Klatschen

1 Circle Beat

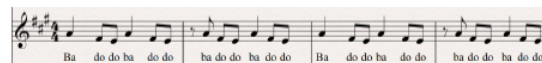


Zu Beginn halten sich alle TeilnehmerInnen an diesen Grundpuls. Dieser wird so lange wiederholt, bis der Rhythmus verinnerlicht ist. Die Gruppe beginnt mit dem rechten Fuß (Rs) zu stampfen. Auf den zweiten Schlag wird geschnipst (Sn) oder alternativ mit zwei Finger auf die Handfläche geschlagen und gleichzeitig mit dem linken Bein (Ls) gestampft. Dies wird für die restlichen zwei Taktschläge wiederholt. Der Circle Beat zieht sich nun durch den gesamten Circle Groove und ist pulsgebend.

2 Key Circle

Nun wird zum Circle Beat dazu der Key Circle einstudiert.

Key Circle



3 Variationen

Zum bestehenden Key Circle können nun verschiedene Variationen einstudiert werden. Dabei werden zwei Gruppen gebildet. Eine Gruppe führt weiterhin den Key Circle aus. Die andere Gruppe kann zwischen Variation 1 und 2 wechseln.