

CORSO CLIL IPRASE 2017-2018



CLIL Module/Lesson Plan

Title: The Water Footprint

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School	Liceo "L. da Vinci" - Trento				
School Grade	Primary <input type="checkbox"/>		Middle <input type="checkbox"/>		High <input checked="" type="checkbox"/>
School Year	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 ^x <input type="checkbox"/>	4 <input type="checkbox"/>	5 <input type="checkbox"/>
Subject :	Science		Topic:	Water management and protection	
CLIL language	English <input checked="" type="checkbox"/> Deutsch <input type="checkbox"/>				

Personal and social-cultural preconditions of all people involved	<p>The scientific high school "Leonardo da Vinci" is one of the historical "Liceo" of the Province of Trento. Nowadays the "Leonardo da Vinci" high school proposes two curricula, foreseen by the reform of the high school, the ordinary scientific curriculum and the applied sciences scientific curriculum. The class consists of 25 students. There are students of foreign origin, but perfectly integrated into the class; there are no SEN students. The classroom is rather small and the available space is therefore limited. The position of the desks is the classic one (in pairs). The narrow space is a factor to consider when planning activities that require movement or different allocation of the desks. A PC, an interactive whiteboard (IWB) and a blackboard are available in the class. The ITC laboratory will be also use. Although the students are particularly bright, their average behavior is polite and participating. The class is generally close-knit and collaborative. The class presents on average linguistic competence level B1+. The physics teacher and the history of art teacher have already experienced short CLIL modules. Therefore, the class has a certain idea of what a CLIL lesson should look like. The motivation and enthusiasm are high.</p> <p>The teacher (Francesca Nardin), who will carry out the CLIL module, teaches Science and Environmental education in various classes from the 1st to the 4th grade of the school and she is the main teacher. She has a C1 English level certification. She is planning Science-CLIL modules in collaboration with some colleagues of her disciplinary Department.</p>
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Students' prior knowledge, skills, competencies	Subject	Language
	Physical-chemical properties of water; Water as a requirement in daily living; Water as a requirement in food/livestock production; Hydrological cycle; Geographical location of the main water-stock zones (oceans, seas, ice caps, glaciers...); Ecosystems balance; To take notes while listening*. To be able to read and interpret maps and graphs; To remember, order, elaborate data; To be able to express an opinion*. To connect information, to reason, discuss and argue on either statements or personal points of view; To collaborate/cooperate with others; To fairly evaluate other's work.	Present, past, future, modal verbs, conditional forms; Reporting verbs; Scientific language generally related to maps and graphs (scale; axes...); Scientific basic vocabulary related to water (sea, ocean, ice, glacier, river, delta...); To be able to listen and understand the main concepts/meaning of a new video/speech. To be able to read and understand the main concepts/meaning of a new text. To be able to express an opinion*. To take notes while listening*. To simply answer open questions.

Timetable fit	Module	Module length 5 Lessons
	Lesson	Lesson length 50'

Description of teaching and learning strategies	<p>The learning and teaching objectives aim at highlighting disciplinary-specific cognitive processes, considering at the same time transversal and communicative outcomes. The lessons have been designed to encourage the development of creative thoughts and ideas; transversal skills as critical thinking and problem solving; the comprehension and production (in both verbal and written form) of the language of intercommunication and the micro-language related to the specific topic.</p> <p>Each lesson follows a pre-task/main task/post-task structure. The lesson starts with an activation of the class aimed at stimulating interest and at bringing out previous knowledge useful/functional for the lesson. The subsequent activities are designed to develop harmoniously and logically, to last 10-15 minutes, alternating between individual work, group work, pairs work and plenary work. Each activity focuses on learning a piece of content, by mixing different linguistic skills. During almost all the activities, either a formative assessment by the teacher or a peer-evaluation is provided. The lesson ends with a post-task or synthesis activity, which might coincide with a summative assessment and a general comparison. The overall CLIL module aims at favoring an extended STT (student talking time). Students are also asked to read aloud a text and to mutual support both the understanding of unknown terminology and the correct pronunciation; to answer to open questions using both the provided material and autonomous and critical elaboration. The teacher will prepare the necessary paper material in advance. Most of the material used is digital (video, PowerPoint, texts, quiz, mindmaps...) and uploaded on the common online platform.</p> <p>The teacher will scaffold the lesson, in particular by verbally supporting the students with paraphrases, providing definitions and questions in order to stimulate the student's cognitive processes. The teacher will explain the activities clearly. She will try to be flexible on managing the lesson plan's timetable, the group work, the timing. Homework are usually provided.</p> <p>The CLIL module will particularly use didactical strategies of cooperative and collaborative work (groups of 2 or 3 depending on the activity); simulation (role-play; interactive simulative tools); project-based learning. The teacher</p>

	<p>will encourage self-evaluation, peer and group feedback, keeping moving around the classroom, supporting and providing suggestions to the groups. The CLIL module is expected to be followed entirely in English. However, if necessary, the use of L1 will be allowed. The teacher will pay attention on speaking slowly, with a clear and modulated voice in coherence with the communicative purposes, asking questions to involve the students and giving them feedback and positive reinforcement. The students will be encouraged to use the specific vocabulary in their verbal or written restitutions.</p> <p>The CLIL Module aims at:</p> <ul style="list-style-type: none"> - showing how vital water is in our lives and why it's so important to look after it; - learning, through discussion and observation, about the importance of water, the many different ways we use it, how it can be wasted and the measures we can take to save it. <p>The learners will:</p> <ul style="list-style-type: none"> • define water-related global/local issues; • discuss methods of water conservation; • discuss potential problems due to lack of water.
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Overall Module Plan

Unit 1 <i>The Blue Gold</i> <hr/> Unit length 5 Lessons – 50 min each	Lesson 1 <i>Why should I save water</i>
	Lesson 2 <i>My Water Footprint</i>
	Lesson 3 <i>Use, waste and safe</i>
	Lesson 4 <i>Water management</i>
	Lesson 5 <i>Which is my role?</i>

A detailed Lesson plan for 2 lessons is provided. For the next lessons, only the list of activities and the materials to be used are provided.

CLIL Lesson Plan

Legend: T = teacher; Ss = students

Unit number 1	Lesson number 1	Location: classroom	Title <i>Why should I save water?</i>
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Activity	Timing (min)	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1. Overview of the lesson plan	3	To be aware of how the lesson has been planned and be involved into the planning itself.	T shows the Unit1 lesson plan (LP_U1) to Ss by projecting it on the screen. Ss are encouraged to participate, to ask for explanations and to take note of the keywords over the next hour.	<p>Skills</p> <div>L S R W</div> <p>...</p> <p>Take a look at the program, the objectives, the activities ... Feel free to ask questions, to intervene, to ask for explanations... Do you have any questions?</p>	<ul style="list-style-type: none"> Whole class Group work Pair work Individual work 	T shows the Lesson Plan (LP_U1) on the IWB	None
2. Brainstorming	10	To identify adjectives, nouns, definitions which can be related to the water resource. To use the correct word for	T uses an interactive brainstorm. T asks each students to identify a noun/adjective/definition to be related to the topic "water resource". At the end, the class is encouraged to reason	<p>Skills</p> <div>L S R W</div>	<ul style="list-style-type: none"> Whole class Group work 	T uses https://www.mindmeister.com/1054394204?new=1 (saved available for students)	None

		<p>the target meaning. To link prior knowledge to the topic of the lesson. To justify the words emerged. To think of water-related global/local issues</p>	<p>on the words emerged. All Ss will work on the emerged words as homework (see task n°6).</p>	<p><i>Water...resource, management, protection, inexhaustible, availability, quality, potability, meaning, mean.</i></p> <p><i>Q: How would you describe the "water resource"?</i> <i>A: I would describe/define the "water resource" as....; Water reminds me...; In my opinion, the water is...</i></p> <p>Others: Would you please add...? Which word comes to your mind when...? What do you think about...? Please, feel free to express your opinion...</p>	<ul style="list-style-type: none"> Pair work Individual work 	<p>on the common platform) and shows it on the IWB.</p>	
3. Listening to a video	2.5 x2 (watching the video) + 5 (writing)	<p>To listen to and understand a short video on the lesson's topic (twice if necessary). To identify important data and information. To write down important keywords and sentences. To identify and understand water-related global/local issues.</p>	<p>Ss watch a short video named "Why Care About Water?" - National Geographic Videos and in pairs must write down key words/important sentences by using U1L1_handout_1_student.</p>	<p>Skills</p> <p>L S R W</p> <p><i>Overusing, over-tapping, over-pumping; water issue; sanitation; hydrosphere; aquifers; unsustainable; today's use/tomorrow's demand; global/local; to overcome</i></p> <p><i>If questions/conditional forms; Modal verbs; Passive forms; future tense; Prepositions verbs: to end up; to fall over; to be faced with.</i></p> <p><i>Listen to the video... Try to catch the meaning; the missing information/words...</i></p>	<ul style="list-style-type: none"> Whole class Group work Pair work Individual work 	<p>T runs the video: https://video.nationalgeographic.com/video/env-freshwater-whycare on the IWB. Ss write down words/sentences by using U1L1_handout_1_student (already printed by T).</p>	<p>Formative assessment (content and language; listening and writing skills)). T walks around the classroom and observes/evaluates what the students write.</p>
4. Group comparison + vocabulary building	15	<p>To compare information and discuss the content of the video. To guess/look for the meaning of unknown words.</p>	<p>Pairs of students (2 Ss vs 2 Ss) compare and reason on their texts, giving peer feedbacks on either the correctness of the words/sentences and the content recalled. Unknown words must be</p>	<p>Skills</p> <p>L S R W</p>	<ul style="list-style-type: none"> Whole class Group work 	<p>Ss use personal notebooks for taking notes and the U1L1_handout_1_student.</p>	<p>Peer evaluation. T formative assessment (Content, language;</p>

		To reason on the meaning and importance of the topic: water-related global/local issues; potential problems due to lack of water. To evaluate other's notes and comprehension.	searched and defined by using a Monolingual Vocabulary. When T rings a bell, groups must change.	<p>New vocabulary definition (e.g. lawn, to flaunt, jug, mighty, to give thought to, a look of shock, to overcome, to be faced with...)</p> <p>Let's compare the first/second/third...sentence... What does it mean? Is it correct? Yes, it is...no, it isn't. What have you written here? Could you please pass me the Vocabulary? Did you understand that...?</p>	<ul style="list-style-type: none"> Pair work Individual work 	Two/three monolingual vocabularies.	reasoning and evaluating skills). T walks around the classroom and observes/evaluates what the students say, giving support when necessary.
5. Work checking + oral return	15	To compare the personal work with the correct one. To autonomously correct mistakes and misunderstood sentences. To compare/check meaning. To give an opinion/comments on the lesson.	<p>Ss compare/correct their work with the correct text (U1L1_handout_1_teacher). A class vocabulary is built (having as draft the Vocabulary prepared by T) based on the emerged important/unknown words. T asks for voluntary oral returns/comments about the lesson.</p> <p>*The Vocabulary is built, by choice, only for difficult/unknown words. For key-words and definitions, students are asked to build their own personal Vocabularies, by using the materials provided during the lessons.</p>	<p>Skills</p> <p>L S R W</p> <p>The same as before.</p> <p>Please, compare your worksheet with the correct one. Did you identify the information correctly? Is it right? What do you think about the video?</p>	<ul style="list-style-type: none"> Whole class Group work Pair work Individual work 	<p>Ss compare their U1L1_handout_1_student with U1L1_handout_1_teacher (shown on the IWB by T). T shows the file Vocabulary to be integrated by Ss additions.</p>	Self-assessment/plenary assessment.
6. Homework	<ul style="list-style-type: none"> Use the emerged words you can find on https://www.mindmeister.com/1054394204?new=1 and classify each of them as. noun, adjective or verb. Build at least 3 sentences related to the water resource by using these words. Read again the text U1L1_handout_1_student corrected. 						

Unit number 1	Lesson number 2	Location: PC-room	Title <i>My water footprint</i>
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Activity	Timing (min)	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
1. Recall of previous lesson	5	<p>To recall keywords and main concepts from the previous lesson.</p> <p>To construct meaningful sentences from given and known words.</p> <p>To relate words to concepts.</p> <p>To tell something related to the previous lesson.</p>	<p>T shows WordCloud on the IWB. The cloud contains words from the text of the previous lesson's main task (U1L1_handout_1_teacher). Ss are asked not to look at the text and encouraged to participate to the plenary refresh.</p>	<p>Skills</p> <p>L S R W</p> <p>Overusing, over-tapping, over-pumping; water issue; sanitation; hydrosphere; aquifers; unsustainable; today's use/tomorrow's demand; global/local; to overcome</p> <p>Have a look on the cloud...do you recognize any sentence? Could you build a meaningful sentence? Do you want to try ...? Do you remember this word/concept? Recall that phrase...</p>	<ul style="list-style-type: none"> Whole class Group work Pair work Individual work 	<p>T uses U1L2_1_WordCloud and shows it on the IWB.</p>	<p>T formative assessment on previous lesson's comprehension and homework (content and language).</p>
2. Reading aloud	20	<p>To read aloud a text.</p> <p>To understand and outline the main concepts of the text.</p> <p>To understand the many different ways we use water, how it can be wasted and the measures we can take to save it.</p> <p>To support others in possible pronunciation mistakes and</p>	<p>T provides each student with a text (Personal Water Footprint) which contains an introduction to the Water Footprint concept. Ss are randomly asked to read aloud some of the text. The meaning of the text is outlined after each paragraph. The whole class and T may help the reader to pronounce the words correctly and to understand possible pronunciation mistakes.</p>	<p>Skills</p> <p>L S R W</p> <p>Water Footprint; daily basis use; consumption; indirect effect; measuring; pollution; wise use.</p>	<ul style="list-style-type: none"> Whole class Group work Pair work Individual work 	<p>SS are given U1L2_2_personalWF_text. The text is also in digital form on the common online platform.</p>	<p>T formative assessment and peer-evaluation of reading and comprehension skills.</p>

		understanding.		Who wants to start? Do you want to go on? What's the meaning of? Which is the main point of this sentence? Did you understand...? The right pronunciation is....Try again. Spell it...			
3. Calculating personal Water Footprint	10	To understand the general meaning of rather complex questions. To reason on the given answers. To learn how personal/family choices and habits affect the water use inside and outside of your home, in the food you eat, the products you buy and even the energy you use.	Ss work in pairs and run the Water Footprint calculator: https://www.watercalculator.org/ .	<p>Skills</p> <div>L S R W</div> <p>Water footprint, consumption, virtual water, indicators, water use efficiency</p> <p>Run the calculator...be fair! Ask for explanations. Think of your average habits and behaviors.</p>	<ul style="list-style-type: none"> Whole class Group work Pair work Individual work 	SS in pairs run: https://www.watercalculator.org/	Formative assessment. T walks around the classroom and observes/evaluates what the students write.
4. Restitution and comments	15	To compare results and discuss the content of both text and calculator. To guess/look for the meaning of unknown words. To reason on the meaning and importance of the topic.	<p>Pairs of students (2 Ss vs 2 Ss) compare and reason on results, Afterwards, unknown words are added to the class vocabulary (always using the class Vocabulary*) by a plenary comparison and research online. T asks for voluntary oral returns/comments about the lesson.</p> <p>*The Vocabulary is built only for difficult/unknown words. For key-words and definitions, students are asked to build their own personal Vocabularies, by using the materials provided during the lessons.</p>	<p>Skills</p> <div>L S R W</div> <p>The same as before</p> <p>Let's compare the results... Why did you get this score? How could you improve your sustainability in water usage? What does it mean? Did you understand that...?</p>	<ul style="list-style-type: none"> Whole class Group work Pair work Individual work 	Ss compare the results and scores obtained from the calculator. The Vocabulary is improved with the unknown words.	T formative assessment. T walks around the classroom and observes/evaluates what the students say, giving support when necessary.
5. Homework	<ul style="list-style-type: none"> Read U1L2_homework_1. Complete, by reading and predicting, U1L2_homework_2. 						

Unit number 1	Lesson number 3	Location: classroom		Title <i>Use, waste and safe</i>
Activity nº1	Homework correction/assessment	20'	Brief plenary correction of U1L2_homework_2 . Afterwards, divide Ss in groups of 3 . Give Ss U1L3_handout_1 (based on U1L2_homework_2), which will be evaluated as a group work. T walks around the classroom giving support when necessary. Each group must select a Leader, who is going to present/read to the class the “summarization task”. Collect the assessment for evaluation.	
Activity nº2	Plenary comparison	10'	Each group presents the personal outcome from the given task.	
Activity nº3	Save water BINGO	20'	<p>Use U1L3_handout_2.</p> <p>Aims: To develop speaking skills through a discussion of the use of water in everyday life; to practice giving advice to others on their roles in water conservation.</p> <p>Procedure:</p> <ul style="list-style-type: none">• Copy and cut out worksheet A so that you have enough to give one game board to each learner (as a BINGO board).• Copy worksheet B and cut out two sets of 8 picture cards per group of 4 learners.• Divide the class into groups of 3 or 4, and give each player a game board (A-D). Give learners time to decide what is happening in each picture, and help if necessary.• Put a pile of loose cards from worksheet B face down in the centre (2 copies of the picture cards is best between 4 players).• The first player picks up a card and the others have to find out if it's one of their pictures by asking a question such as: “<i>Is she watering the garden?</i>”• Players take turns to ask until the person holding the picture says “yes”.• When the player with the picture card answers yes, the player who asked the right question wins the card and puts it on their board. That person takes the next picture and the others ask them the questions.• The winner is the first to match all 4 pictures on their board. They should shout “BINGO!”. <p>T formative assessment. T walks around the classroom and observes/evaluates what the students say, giving support when necessary.</p>	
Homework	By using U1L3_handout_2 students should try to put the 8 pictures in order according to which they think use the most water and be prepared to motivate their ordering. Ss must complete Worksheet C of U1L3_handout_2 , by writing a brief text to be hung at school, in which they explain to others students how they can contribute to water saving. Give an example in class!!			

Unit number 1	Lesson number 4	Location: PC-room		Title <i>Water Management</i>
Activity n°1	Homework correction and recall of previous lesson	10'	Plenary comparison based on the homework: U1L4_handout_2 (Worksheet C).	
Activity n°2	Vocabulary building	5'	Completion of the class Vocabulary with new unknown terminology emerged. T completes it by projecting it onto the IWB, based on the Ss' contribution.	
Activity n°3	Graph interpretation	10'	<p>Show U1L3_water graph_3 on the IWB. In pairs Ss are asked to discuss and make hypotheses on the graph, while T leads the interpretation with inputs and questions, in order to help Ss to understand the shortage of water. After the pairs work, T encourages Ss to share their thoughts with the class.</p> <p>They should understand from the graph that the volume of clean water is decreasing. Possible answers include less rainfall (droughts); more people wasting water; more cars mean more cars being washed etc. If learners bring up the idea that floods mean more water, T should point out that we are talking about clean water for human use.</p>	
Activity n°4	Quizlet on water	20'	Ss work in pairs and use alternately (10' each group): U1L4_quizlet_4a ; U1L4_quizlet_4b , by running the quiz on the PC. T formative assessment. T walks around the classroom and observes/ evaluates what the students do, giving support when necessary.	
Activity n°5	Group comparison	5'	Pairs of students (2 Ss vs 2 Ss) compare and reason on their quiz-results.	
Homework	By using U1L4_homework_1 , Ss must collect data on their family's water consumption habits and build a table as shown in the handout.			

Unit number 1	Lesson number 5	Location: classroom		Title <i>Which is my role?</i>
Activity n°1	Homework correction/assessment	10'	Plenary comparison based on the homework: U1L4_homework_1 . T asks Ss to individually comment on the results collected (the 7 tables) and the family habits emerged.	
Activity n°2	Role play – final assessment	40'	Use U1L5_Roleplay_students/teacher . The final assessment of the over unit will be the evaluation of the efforts/participation/skills developed of Ss during the Roleplay.	

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Sources:

Why Care About Water? | National Geographic:

<https://www.youtube.com/watch?v=Fvkzt3b-dU>

→ Transcript has been made by the teacher by using <http://otranscribe.com/>

Personal Water Footprint

<http://waterfootprint.org/en/water-footprint/personal-water-footprint/>

Water Footprint calculator

<https://www.watercalculator.org/>

U1L2_homework_1 has been elaborated from: http://aquapath-project.eu/wp-content/uploads/2016/05/teacher_en.pdf

U1L2_homework_2; U1L2_homework_2_teacher; U1L3_handout_1; U1L4_homework_1 have been elaborated from:

http://www.xtec.cat/monografics/cirel/pla_le/nile/nines_ortiz/

U1L3_handout_2 has been elaborated from:

<https://www.teachingenglish.org.uk/article/save-water>

Quizlet:

<https://quizlet.com/275026954/save-water-flash-cards/>

<https://quizlet.com/151838828/water-management-flash-cards/>

Roleplay:

Roleplay on globalization of water management, University of Twente, The Netherlands.