

CLIL Module Plan

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School	Liceo Scientifico "Da Vinci" Trento				
School Grade	<input type="radio"/> Primary		<input type="radio"/> Middle		<input checked="" type="radio"/> High
School Year	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3	<input type="radio"/> 4	<input type="radio"/> 5
Subject	Scienze naturali	Topic	Difference between monocotyledon and dicotyledon, main characteristic of p		
CLIL Language	<input checked="" type="radio"/> English			<input type="radio"/> Deutsch	

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. A typical 3th grade class consists of 25 students. There are students of foreign origin, but normally perfectly integrated into the class; there are no or few 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. 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 motivation and enthusiasm are high. The teacher, who will carry out the CLIL module, teaches Science and Environmental education and she/he is the main teacher. She/he has a C1 English level certification. She/he is planning Science-CLIL modules in collaboration with some colleagues of her/his disciplinary Department.</p>
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Students' prior knowledge, skills, competencies	Subject	Language
	<ul style="list-style-type: none"> ● To describe a plant cell structure ● To remember the main biochemical molecules, ● to understand differences between mitosis and meiosis ● to use optical microscope to prepare a section ● To define, to identify, to compare, to predict, to hypothesize and to reason 	<p>Present, past, future, modal verbs, conditional forms; Reporting verbs; Scientific basic vocabulary related to plants biology (see "glossary"); 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</p>

Timetable fit	⊙ Lesson	Length 10 lessons
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Description of teaching and learning strategies	<p>The whole module is based on the powerpoint presentation: “Angiosperms: an overview.ppt” with pictures, texts, instructions, links to external sources. There are also single files for each handout the teacher needs to use. Of course, the teacher has to print them in advance. We are going to use a clip from Youtube about Angiosperms, and we cut it into short parts. For each of them we prepared different activities: running dictation, fill in the gaps, reorder the text, answering open questions. There is a microscopy lab activity in order to observe cross and longitudinal sections of a stem. During this lab students identify similarities or differences and hypothesise and explain their observations. During class activity there are also laboratory activities where students use pictures or concrete objects (fresh flowers, woody sections of a trunk) to identify and describe to understand the structures and functions of plants. During the working class students explain the events, data and phenomena, using CALP language. Students are also requested to do some homework like prepare a short glossary, complete handouts and check the corrected handouts after the lesson. Both formative and summative assessment is used. Formative assessment consists in correcting or checking class activities from the handouts, or checking homework. At the end of the lesson there is a final assessment. In general, 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>
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Overall Module Plan

Unit: 1 Angiosperms: an overview Unit length: 10	Lesson 1 Highlight the differences-Building a glossary
	Lesson 2 Phytotomy
	Lesson 3 Vegetal tissues- Dermal tissue
	Lesson 4 GROUND TISSUE
	Lesson 5 VASCULAR tissue
	Lesson 6 DISSECTION OF STEM OF CELERY
	Lesson 7 PRIMARY GROWTH
	Lesson 8 Secondary growth
	Lesson 9 The Flower
	Lesson 10 Final assessment

CLIL Lesson Plan

Unit number	1	Lesson number	1	Title	Highlight the differences-Building a glossary
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment				
1	40'	Review prior knowledge; remember specific words about plant cell; identify main differences between monocots and dicots	S's role They should write useful information about differences between monocotyledon and dicotyledon while watching the video T's role Use slide from file: angiosperms an overview.ppt Use video clip link from min. 00.00 to 02.00.	<p>Skills</p> <table border="1"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary monocotyledon; dicotyledon; vascular bundles; seed leaves; flower parts; mature leaves; roots.</p> <p>Communicative structures Listen to the video clip...try to catch any useful information; write any word you associate to difference between...did you understand?</p>	L	S	R	W	<input type="checkbox"/> Whole class <input type="checkbox"/> Group work <input checked="" type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work	<ul style="list-style-type: none"> • angiosperms an overview.pptx • 1 handout scheme.doc.docx <p>Handout 1 File name: angiosperms an overview.ppt Video clip link</p>	none
L	S	R	W								

2	10'	Building a glossary	Define and remember definitions and words	<p>Skills</p> <p>L S R W</p> <p>Key vocabulary see Glossary I block (Seed; Angiosperms; Cotyledo-cot; Dandelion; Grass) Endosperm; Leaf, Vein; Vascular ; to be net like; to branch out; blade; to pull out; taproot system.</p> <p>Communicative structures Complete the Glossary...Ask the teacher if necessary; do you want to listen to the video again? Feel free to ask for explanation...give us the definition of....</p>	<input type="checkbox"/> Whole class <input type="checkbox"/> Group work <input type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work	<ul style="list-style-type: none"> • angiosperms an overview.pptx • 2 handout glossary for teacher.docx • 2 handout glossary.doc.docx <p>Handout 2</p>	none
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CLIL Lesson Plan

Unit number	1	Lesson number	2	Title	Phytotomy
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
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1	50'	Remember the definitions from previous lesson. Compare and define while correcting worksheet	T's role: Check the glossary from last lesson inviting one student to write the definitions on the board. Give students Handout 3 Ask students to complete the paper while listening to the clip from min. 02.00 to min. 02.57 link Check the handout: ask students to exchange their own with their partner S's role: Check your own glossary by comparing with the definitions on the board. Fill in the gaps: invite students to complete the paper while listening to the clip. Check the handout: ask students to exchange their own with their partner's. Students should complete the paper while listening to the clip Check the handout: ask students to exchange their own with their partner's. Homework: review the glossary	<p>Skills</p> <p>L S R W</p> <p>Key vocabulary Phytotomy ,root system, shoot system, dermal tissue, ground tissue, vascular tissue</p> <p>Communicative structures When we talk about.... We call that the.....</p>	<input checked="" type="checkbox"/> Whole class <input type="checkbox"/> Group work <input type="checkbox"/> Pair work <input type="checkbox"/> Individual work	<ul style="list-style-type: none"> • angiosperms an overview.pptx • 3 handout filling the gaps with solutions.odt.docx • 3 handout filling the gaps.odt.docx <p>File name: angiosperms an overview.ppt Video clip link Handout 3</p>	Formative: Check handout 3
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CLIL Lesson Plan

Unit number	1	Lesson number	3	Title	Vegetal tissues- Dermal tissue
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment				
1	10'	Identify main components and functions of the three principal tissues	t'srole: Listen to the video clip link from min. 02.32 to min. 03.50 Gap-fill exercise about tissue Give students handout 4. s's role: Students fill in the table while listening to the clip	<p>Skills</p> <table border="1"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary vegetal tissue, dermal, ground, vascular; features; function, components.</p> <p>Communicative structures Listen to the video clip...try to catch information related to the three different tissue; write any word you associate to tissue's type. Is this word/adjective related to...? Are you sure of this match?</p>	L	S	R	W	<input type="checkbox"/> Whole class <input type="checkbox"/> Group work <input type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work	<ul style="list-style-type: none"> • angiosperms an overview.pptx • 4 handout SCHEME_.docx 	none
L	S	R	W								

2	40'	<p>Remember content from previous lessons. Identify and classify structure while referring to its definition. Hypothesise what it could be by observing a picture of a dermal tissue</p>	<p>Give students handout 5.1 Play the clip from min 03.50 to min. 05.03. Video clip link Ask students to recognize some parts by using plastified pictures of tissue At the end, give students handout 5.2 (glossary block) s's role: Give students handout 5.1 Listen to the clip from min 03.50 to min. 05.03. Using plastified pictures of tissue try to recognize: ground tissue,epidermal tissue,vascular tissue,cuticole,guard cells,stomata. Homework: revise handout 5.2</p>	<p>Skills</p> <table border="1" data-bbox="1003 167 1355 215"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary the one of previous tasks; epidermiscross-section of a leaf; guard cells; stomata; hole; good feedback;moisture;water come out, a bunch of carbon dioxide; water; waxy; cuticle; slippery.</p> <p>Communicative structures Listen to the video clip...try to catch information related to the dermal tissue; fill in the gaps the missing words; did you understand? Do you want to listen to the video again?</p>	L	S	R	W	<p><input type="checkbox"/> Whole class <input type="checkbox"/> Group work <input type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work</p>	<ul style="list-style-type: none"> • PL0072 685zDicot Stem Overview.jpg • angiosperms an overview.pptx • 5.1 Handout DERMAL TISSUE.docx • 5.2 handout II block.docx • 1566-399479.jpg • foglia dicot.jpg • foglia stomi cuticola(1).jpg • fusto dicot.jpg • periderma(1).jpg • sezione foglia per tegumento(1).jpg • stomi.jpg <p>File name: angiosperms an overview.ppt Video clip link Handout 5.1 Plastified pictures of tissue Handout 5.2</p>	
L	S	R	W								

CLIL Lesson Plan

Unit number	1	Lesson number	4	Title	GROUND TISSUE
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment				
1	50'	Identify and evaluate if some information might be related to a particular type of ground tissue, while giving reason about key-words identified	t's role: Warm up activity: ask students to write 3 sentences using words from the "word cloud" Ask students to identify structures on a picture from the last lesson Give students handout 6 Play the clip from the min. 5.02 to 06.20 link Ask students to write down some keywords from the clip or from the text in the handout. s's role Write three sentences using words from "word cloud" Use handout 6 Listen to the clip and write down keywords from the clip or from the text in the handout	<p>Skills</p> <table border="1"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary ground tissue, epidermal tissue, vascular tissue, cuticle, guard cells, stomata parenchyma collenchyma sclerenchyma cortex</p> <p>Communicative structures The parenchyma tissue is typically composed of... Collenchyma provides... There are two types of</p>	L	S	R	W	<input checked="" type="checkbox"/> Whole class <input checked="" type="checkbox"/> Group work <input type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work	<ul style="list-style-type: none"> • 6 handout GROUND TISSUE_.docx • 6 handout GROUND TISSUE for teacher.docx <p>Pictures from file name: angiosperms an overview.ppt: Word cloud from file name: angiosperms an overview.ppt Handout 6 Video clip link</p>	Formative for some students acting in the warm up activity or correct paper from the students
L	S	R	W								

CLIL Lesson Plan

Unit number	1	Lesson number	5	Title	VASCULAR tissue
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment				
1	50	remember identify, and order information about vascular tissue. Define the differences between monocots and dicots; Distinguish different functions between transport systems.	t's role: Use HANDOUT 7 stick 5 or 6 texts to the wall outside the classroom. Running dictation CHECK AND CORRECT THE TEXT BY LISTENING TO THE CLIP: link (min 06.20-06.50)	<p>Skills</p> <table border="1"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary Vascular tissue; xylem; phloem; Xylem moves water from the roots to the shoots. Phloem moves sugar up and down in a plant; Dermis; sclerenchyma cells; durable support.</p>	L	S	R	W	<input checked="" type="checkbox"/> Whole class <input checked="" type="checkbox"/> Group work <input type="checkbox"/> Pair work <input type="checkbox"/> Individual work	<ul style="list-style-type: none"> • angiosperms an overview.pptx • 7 handout vascular running dic.docx <p>File name: angiosperms an overview.ppt HANDOUT 7 THE CLIP link min 06.20-06.50</p>	
L	S	R	W								

Communicative structures

I'm going to divide you into 5-6 groups...One member of the group runs out of the class...he/she reads part of the text...he/she tries to remember as many words as possible; He/she runs into the class and dictate to ...the others writes on a paper. be fair! Try to remember as much as you can! Be fast and precise! Shift person after each run!

CLIL Lesson Plan

Unit number	1	Lesson number	6	Title	DISSECTION OF STEM OF CELERY
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment				
1	100'	Remember specific words used in lab, identify, and order information about procedures used, evaluate if observation is good	t's role: Give out HANDOUT 8 Check glossary with the students. Let them prepare slide and use microscopes. Ask students to complete handout 8 for homework. s's role: Use HANDOUT 8 Prepare the slides and observe with optical microscope. Ask students to complete handout 8 for homework.	<p>Skills</p> <table border="1"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary Microscopes Microscope slides magnification cross-sections stains</p> <p>Communicative structures We treated (a specimen for the microscope) with a reagent in microscopy in order to.. Which species did you investigate What magnification(s) did you use to observe your specimens? Why are stains useful i</p>	L	S	R	W	<input type="checkbox"/> Whole class <input type="checkbox"/> Group work <input checked="" type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work	<ul style="list-style-type: none"> angiosperms an overview.pptx 8 handout microscopy.docx <p>File name: angiosperms an overview.ppt microscopy lab HANDOUT 8</p>	Formative: correct handout 8 containing lab report
L	S	R	W								

CLIL Lesson Plan

Unit number	1	Lesson number	7	Title	PRIMARY GROWTH
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment				
1	50'	Define function of primary growth, hypothesise what could happen in meristematic system	t's role: Collect and correct handout 8 play the clip from min. 06.50 to 08.44. link Give students HANDOUT 9. invite them to reorder the text. Check with the whole class by listening again to the clip. s's role: Listen to the clip using HANDOUT 9 Reorder the text. Check by listening to the clip again.	<p>Skills</p> <table border="1"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary PRIMARY GROWTH; spike; hammer; they grow from the bottom; shoots; wider; apical meristem; undifferentiated.</p>	L	S	R	W	<input checked="" type="checkbox"/> Whole class <input type="checkbox"/> Group work <input type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work	<ul style="list-style-type: none"> angiosperms an overview.pptx 9 handout - primary growth.docx <p>File name: angiosperms an overview.ppt clip from min. 06.50 to 08.44. link HANDOUT 9.</p>	None
L	S	R	W								

Communicative structures

Listen carefully to the video clip...try to reorder the text; is this related to...? Are you sure this makes sense? Be coherent...Did you understand the meaning of? Comparative form, modal verbs

CLIL Lesson Plan

Unit number	1	Lesson number	8	Title	Secondary growth
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment
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1	50'	Recognize and define functions, hypothesise what could happen in the different tissues and structures inside a trunk	t's role: Give students handout 10 Play clip link from 08.45 to 10.50 s's role: Use handouts 10 and while listening to the clip complete the names of the parts on handout 10.2 Obtain a slice of a trunk, observe and try to recognize its parts, seasonal rings and guess how old it was.	<p>Skills</p> <table border="1" data-bbox="790 167 1081 212"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary xilem phloem cambium bark vascular cambium rings</p> <p>Communicative structures Secondary growth allows the tree to get You will get are these... What would this look like</p>	L	S	R	W	<input type="checkbox"/> Whole class <input checked="" type="checkbox"/> Group work <input type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work	<ul style="list-style-type: none"> • angiosperms an overview.pptx • 10 handout - secondary growth.docx • fusto dicot.jpg • periderma(1).jpg • PL0072_685zDicotStemOverview.jpg <p>File name: angiosperms an overview.ppt handout 10 clip link Slices of a trunk</p>	
L	S	R	W								

CLIL Lesson Plan

Unit number	1	Lesson number	9	Title	The Flower
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment				
1	100'	Remember the reproduction phases; Recognise fertilisation structures; Identify fertilisation functions.	t's role: Give out handout 11.1 Give students a fresh flower to observe. Ask them to compare it with the flower in the picture. Listen to the clip from min. 10.50 to 11.35. Ask students to label the picture on handout 11.1 Collect handout 11.1 Listen to the clip from min. 11.35 to the end. Give out cards prepared from handout 11.2 Ask students to build up the sequence of double fertilization by matching picture and text Correct handout 11.1 Meanwhile, students work with plastified cards to put the pictures and texts in the right order while listening to the clip from min. 11.35 to the end. Give students handout 11.3 s's role. Use handout 11.1 Listen	Skills <table border="1" style="margin-left: 20px;"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> Key vocabulary Communicative structures	L	S	R	W	<input type="checkbox"/> Whole class <input type="checkbox"/> Group work <input type="checkbox"/> Pair work <input type="checkbox"/> Individual work	<ul style="list-style-type: none"> • angiosperms an overview.pptx • 11.1 fertilization card to print.docx • 11.3 handout flower.docx • handout 11.2 fertilization card to print.docx • fertilization card to print(1).docx • fertilization card to print.docx <p>File name: angiosperms an overview.ppt Fresh flowers to look at</p>	Formative: check handout 11.1
L	S	R	W								

Use handout 11.1 Listen to the clip from min. 10.50 to 11.35 meanwhile label the picture. Observe the fresh flower and recognize the same parts shown in the pictures Listen to the clip from min. 11.35 to the end Use cards to put the pictures and texts in the right order. Build up the sequence of double fertilization using sentences and pictures. Check the correct matching while listening the clip.

and touch (Lilium) handout 11.1 clip [link](#) Plastified card from the handout 11.2 fertilization card to print.docx handout 11.3

CLIL Lesson Plan

Unit number	1	Lesson number	10	Title	Final assessment
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Activity	Timing	Learning Outcomes	Activity Procedure	Language	Interaction	Materials	Assessment				
1	50'			<p>Skills</p> <table border="1"> <tr> <td>L</td> <td>S</td> <td>R</td> <td>W</td> </tr> </table> <p>Key vocabulary</p> <p>Communicative structures</p>	L	S	R	W	<input type="checkbox"/> Whole class <input type="checkbox"/> Group work <input type="checkbox"/> Pair work <input checked="" type="checkbox"/> Individual work	<ul style="list-style-type: none"> • FINAL ASSESSMENT.odt.docx • FINAL ASSESSMENT_Teacher.odt.docx • Griglie di valutazione angiosperms an overview 2017.doc.docx 	
L	S	R	W								