



GEP 1	Task 1 : Input & Cooperative /Collaborative learning in CLIL
Title of the lesson or topic	'THE EVOLUTION OF TECHNOLOGY'
Course / year / age	1st ESO (HORA B) / 2018-2019/ 12years
Timing	3 sessions (3h)
Collaboration with	English teacher: Emili Morales
Short description of the session/s	<p>'The aim of these lesson plans is to explore inventions and analyze how they have changed through the years'</p> <p>SESSION 1 -Describe the evolution of technological objects using adequate adjectives and compare past and present with comparative sentences</p> <p>SESSION 2 -Analyze the importance of describing well the necessities in order to create useful objects that help us in our daily activities.</p> <p>SESSION 3 -Learn about some of the main inventors of the 20th century</p>



The descriptions of the activities below should contain:

1. type of input,
2. questions (explicit, implicit and referential) posed by the teacher to ensure the students' involvement
3. dynamic instructions with collaborative and cooperative activities,
4. materials used.

S E S S I O N 1	Activity 1	<p><u>PAIRS OF OBJECTS (BEFORE AND NOW)</u></p> <p style="text-align: right;">Ice-breaker activity <u>Visual input</u> to practice the contents (past & present objects pictures) (3 students/group) <u>Material</u>: Pictures of several objects</p> <p>Description:</p> <ul style="list-style-type: none"> • Teacher hands out a box with several pictures of objects. • Students have to make pairs of these images related to how these objects were before and how these are nowadays.
	Activity 2	<p><u>MEMORY GAME WITH OPPOSITES</u></p> <p style="text-align: right;">Linguistic input to practice the language (<u>opposite adjectives</u>) (3 students/group) Material: two different colored poster board, scissors, markers COMPUTER FOR TEACHER</p> <p>Description:</p> <ul style="list-style-type: none"> • Students brainstorm <u>opposite</u> adjectives related to the pictures of the previous activity. Teachers use <i>ANSWER GARDEN</i> to share the adjectives with the class. • Students make a memory game using adjectives revised in the previous task for the other groups to play. The aim of the game is to find pairs of opposites.



	Activity 3	<p><u>HANG THE SENTENCES OUT TO DRY</u> <u>(SEE VIDEO OF THE TASK)</u> <u>(SEE VIDEO OF INSTRUCTIONS)</u></p> <p>Activity to conclude and practice with the content and language Linguistic and visual input Material: poster board, scissors, markers, blue tack, rope, clothespins (3 students/group)</p> <p>Description:</p> <ul style="list-style-type: none">• Each group of students write a couple of sentences using comparatives of equality and superiority, under the supervision of the language teacher. (using also the adjectives worked on the activity 2)• Students write them on a poster board and cut off the words separately.• Students exchange cards (words of two sentences) and reconstruct them on the board (using blue/white tack) or “hang them out” on a line in the class.
S E S S I O N 2	Activity 4	<p><u>RUN TO THE BOARD</u> <u>(SEE VIDEO OF THE TASK)</u></p> <p>Review vocabulary activity Kinesthetic input class in two teams Material: 2 markers, a board, a timer</p> <p>Description:</p> <ul style="list-style-type: none">• Divide the class in two groups• During one minute one by one members of both groups write a word on the board related to describing objects• Finally teacher does the count of words of each group (discard mistaken words)

<p>Activity 5</p>	<p><u>ROUND ROBIN</u> <u>(SEE VIDEO OF THE TASK)</u></p> <p style="text-align: right;">Spoken input (groups of 4 students) Material: a timer</p> <p>Description:</p> <ul style="list-style-type: none"> • Divide the class in groups of four • Teacher choose a necessity, for example: <i>transports, communication, entertainment, education...</i> • During 1 minute and by order members of the groups say objects related to satisfy this necessity (no repetitions)
<p>Activity 6</p>	<p><u>OBJECTS & NECESSITIES</u></p> <p style="text-align: right;">Spoken input COMPUTER FOR TEACHER (all the group but individual participation) ICT tool: CANVA Material: <u>cards with names of the objects</u></p> <p>Description:</p> <ul style="list-style-type: none"> • Teacher hands out cards with names of several objects to all the students of the class. • After that, teacher projects images of these objects on the board using Canva app • Orally, the student that has got the correct card, stands up and make a sentence like: <i>'We use (object) to (action) so it / I / we (consequence)'</i> <p style="text-align: center;"><i>Ex. We use <u>glasses</u> to <u>see well</u> so we <u>don't have headaches</u> We use a <u>telescope</u> to <u>see distant objects</u> so we <u>discover new planets.</u></i></p>

S E S S I O N 3	Activity 7	<p><u>JIGSAW READING</u></p> <p style="text-align: right;">Reading comprehension activity Text input</p> <p style="text-align: right;">Cooperative task (groups of 4/5 students) Material: copies of the different texts</p> <p>Description:</p> <ul style="list-style-type: none"> • Each student in a group will read a brief biography of great XX century inventors. • They will find the students from other groups that have the same inventors and answer the explicit and implicit questions. • Then get back to the original groups and answer referential questions.
	Activity 8	<p><u>WHAT, WHEN AND WHO INVENTED...?</u></p> <p style="text-align: right;">COMPUTER FOR STUDENTS Collaborative activity ICT tool: PADLET</p> <p>Description:</p> <ul style="list-style-type: none"> • Using the Padlet app, each student as a collaborative activity must find and upload an image of an invention of the 20th century and write the year when it was invented and the name of the inventor. The link of this web is: https://padlet.com/1ESO1819/WHATWHENWHO PASSWORD: inventions <p>(This activity could be more developed in following sessions. As a cooperative task in order to design a timeline as a final product)</p>

<p>In terms of academic content, what are the students learning and what are they learning to do?</p>	<ul style="list-style-type: none"> ➤ The importance of evolution in technology ➤ Technology definition ➤ Some inventors and their inventions ➤ Relate objects and necessities ➤ Use ICT tools ➤ Teamwork
<p>In terms of language, what are the students practicing or learning to do?</p>	<ul style="list-style-type: none"> ➤ Opposite adjectives describing objects. ➤ Comparatives and superlatives ➤ Specific vocabulary ➤ Reading & listening comprehension ➤ Speaking
<p>In what way is this lesson plan a good example of what we learnt in the GEP course session?</p>	<p>In this lesson plan we try to work contents of technology and language of English using:</p> <ul style="list-style-type: none"> - inputs as speak, talk, write, visual... - collaborative and cooperative activities - make sessions and activities of inputs, procedures, final products, review and summary. - use the repetition of contents and languages - formulate questions to make sure the students understand us - use digital tools



Other important information	<p>ICT tools used:</p> <ul style="list-style-type: none">➤ For making groups: INSTANT CLASSROOM (in activities 1,2,3,4,5,7) http://www.superteachertools.us/instantclassroom/?groupid=219768➤ For share words with all the group: ANSWERGARDEN (in activity 2) https://answergarden.ch/create/➤ For counting down: 1 MINUTE TIMER(activities 4,5) https://www.youtube.com/watch?v=CH50zuS8DD0➤ For presenting contents: CANVA (in activity 6) https://www.canva.com/design/DADloczRY7E/IJpt7Y_IL8I76uI2EPtUgA/edit➤ For collaborative activities: PADLET(in activity 8) https://padlet.com/1ESO1819/WHATWHENWHO (PASSWORD: inventions)
ANNEXES (materials, handout, pictures... if not possible to include in the activity section)	



Self assessment Checklist

Task 1 : Input Cooperative/Collaborative learning in CLIL	YES/NO
1. Students are presented with multimodal and varied input (spoken, written, visual, hands-on...)	YES
2. The input presented is used to help learners understand ideas and construct meaning	YES
3. The input is presented at the right cognitive level and the right language level , i.e. it is neither too challenging in terms of content nor too difficult in terms of language.	YES
4. Students are helped in someway to understand , i.e. input is made comprehensible	YES
5. Students are helped in someway to process the input presented, i.e. activities or questions make students think and construct meaning.	YES



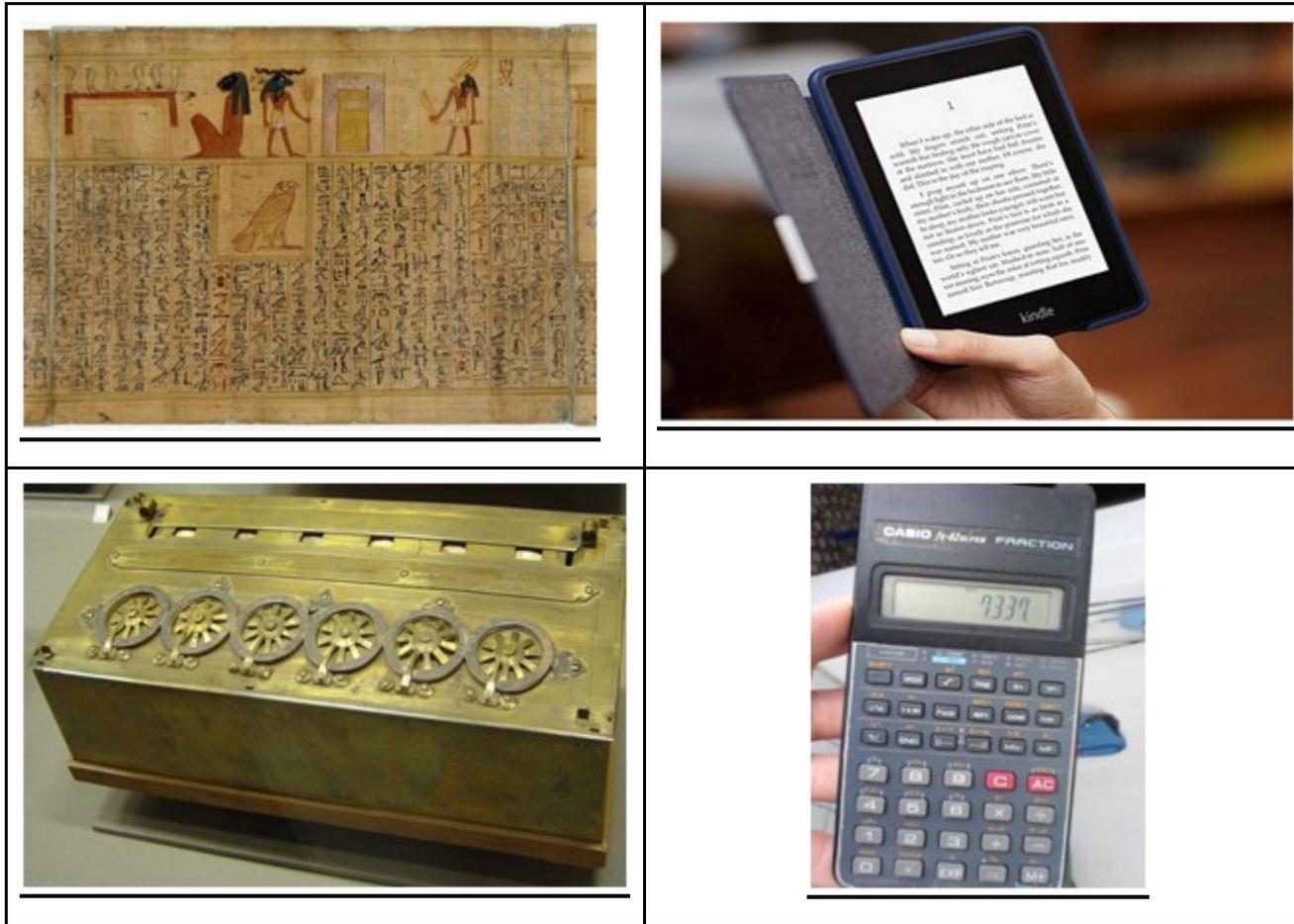
6. The input and activities presented cater to multiple intelligences	YES
7. Students are presented with good questions (explicit, implicit and referential) that help them process input and that challenge them not only to understand, but to think, create...	YES
8. A variety of collaborative learning strategies are used throughout the session.	YES
9. At least one of the activities presented requires cooperation among students.	YES
10. Students are explicitly taught how to work in groups (or pairs).	YES
11. Students are explicitly guided to succeed in group/pair work discussions and interactions . Clear support to guide their interactions is provided.	YES
12. At least one ICT tool is used to promote digital collaborative learning .	YES

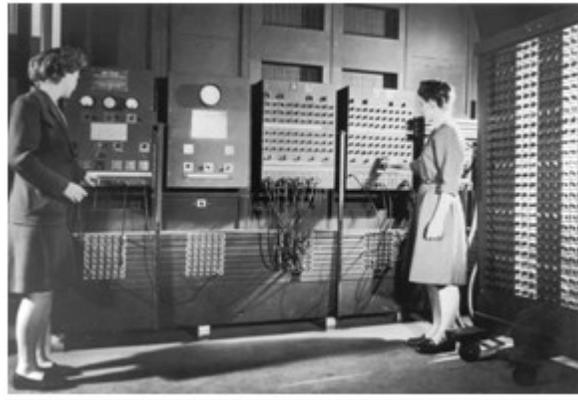
Activity 1

PAIRS OF OBJECTS (BEFORE AND NOW)

Prepare before the activity, cutting the following images and put them mixed in a box

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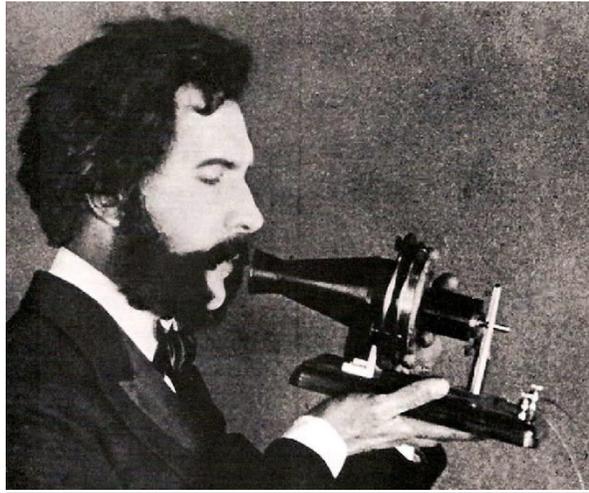












Images from Pixabay and Google labeled for reuse images



Activity 2

MEMORY GAME WITH OPPOSITES

Some ideas of adjectives in order to help the students in case they will need

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BIG	SMALL	COMMON	STRANGE
LONG	SHORT	ROUGH	SMOOTH
CHEAP	EXPENSIVE	SPECIAL	ORDINARY
GOOD	BAD	ANALOG	DIGITAL
TRADITIONAL	MODERN	NARROW	WIDE
NEW	OLD	DARK	BRIGHT
LIGHT	HEAVY	USEFUL	USELESS
SOFT	HARD	DIFFICULT	EASY
MODERN	OLD-FASHIONED	TINY	ENORMOUS
COMPLETE	INCOMPLETE	SMALL	LARGE
EASY	DIFFICULT	HIGH	LOW
FAST	SLOW	DANGEROUS	SAFE
INTERESTING	BORING	HIGH	LOW
LOW	HIGH	LOUD	QUIET
NARROW	WIDE	CLEAN	DIRTY

Activity 3

HANG THE SENTENCES OUT TO DRY





Activity 4
RUN TO THE BOARD

During one minute one by one members of both groups write a word on the board related to describing objects.
This activity is for review previous session.

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Activity 5 **ROUND ROBIN**

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'Technology is an essential part of our lives today and few can imagine living without. With technological advances we can evolve and satisfy our daily life necessities.'

So the aim of this game is recognize necessities and how technology offer us solutions.

Divide the class in groups of four and during one minute by order members of the groups say objects related to satisfy a necessity that teacher have choose at the beginning of the game.

Examples (if the students have difficulties to find words teacher can prepare a card with some examples and they can used it)

TRANSPORTS: car, plane, bus, ship, bike, train, air balloon...
COMMUNICATIONS: phone, email, whatsapp, skype, ...
ENTERTAINMENT: tv, books, spotify, playstation, wii, cinema, camera photo...
EDUCATION: computers, books, pencils, folders, markers, world wide web, set square, maps, calculator...
HEALTH: band aid, medicines, thermometer, glasses, crosses, oxygen machine, lotions, x-ray, tooth braces, stethoscope
SCIENCE RESEARCH: telescope, microscope, magnifying glass, bunsen burner, tester, barometer, test tube, balance...
ENERGY: batteries, engines, generator, windmill, light bulb, solar panels, wheels, fuels, stem engine...
FOOD: fridge, oven, microwave, spoon, tin cans, cooking pot, cups, mixer machine, ...



Activity 6

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OBJECTS & NECESSITIES

Cut the following vocabulary cards and hand out to students before starting CANVA presentation

SET SQUARE	PLANE	BOOKS	SHIP
HEADPHONES	MOBILE PHONES	CINEMA CAMERA	MAGNIFYING GLASS
BASKETBALL	COMPASS	COMPUTER	LIGHT BULB
FORK	PEN	TELESCOPE	GLASSES

During the presentation with Canva app, the student that has got the correct card, stands up and make a sentence like:
'We use (object) to (action) because it / I / we (consequence)'

Link Canva's presentation:

https://www.canva.com/design/DADloczRY7E/IJpt7Y_IL8I76ul2EPtUgA/edit



Generalitat de Catalunya
Departament d'Ensenyament

Created by TEACHERS: Rosa Manzano & Emili Morales
Institut Pla de les Moreres (Vilanova del Camí)

The image shows a Canva design template for a presentation slide. The main content area has a light green background with a repeating geometric pattern of diamonds. The title "OBJECTS AND NECESSITIES" is written in large, bold, dark blue capital letters. Below the title is a horizontal line, followed by the text "WHAT IS IT FOR?" in smaller, dark blue capital letters. Underneath this text are six purple icons: a lightbulb, a paper airplane, a computer monitor, a star, a pencil, and a graduation cap. In the bottom right corner of the design area, there is a dark grey rounded rectangle containing a white icon of a presentation screen, a left arrow, the text "1/17", and a right arrow. On the right side of the Canva interface, there is a white panel with the Canva logo (a teal circle with the word "Canva" in white), the text "Crea un disseny com aquest!", and "Registra-t'hi de franc en només 10 segons (o 6, si saps escriure molt ràpid)". Below this is a green "Prova" button. At the bottom of the panel, it says "En registrar-t'hi, acceptes les [Condicions d'ús](#) i la [Política de privadesa](#) de Canva." The top of the Canva interface shows the name "Rosa Manzano" and a close button (an 'x' in a grey circle). On the left side, there is a dark grey sidebar with various menu items like "diss", "Reg", "Regi", "S", "Info.", "Design", "Caract.", and "Crea un disseny". At the bottom left, there is a small text "verant www.google-analytics.com".

Plantilla creada pel grup de formadores del Programa GEP (Generació Plurilingüe) del Departament d'Ensenyament. Curs 2018-2019





Generalitat de Catalunya
Departament d'Ensenyament

Created by TEACHERS: Rosa Manzano & Emili Morales
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Activity 7

JIGSAW READING

Margaret Hamilton, née **Margaret Heafield**, was an American computer scientist who was one of the first computer software programmers; she created the term *software engineer* to describe her work. At MIT she began programming software to predict the weather and did postgraduate work in meteorology. She led a team that was tasked with developing the software for the guidance and control systems of the in-flight command and lunar modules of the Apollo missions to the Moon in the late 1960s and early '70s.

Adapted from <https://www.britannica.com/biography/Margaret-Hamilton-American-computer-scientist>

Heddy Lamarr was a Hollywood actress who starred in Boom Town, Tortilla Flat and Samson and Delilah. In 1942, during the heyday of her career, Lamarr earned recognition in a field quite different from entertainment. She and her friend, the composer George Antheil, received a patent for an idea of a radio signaling device, or "Secret Communications System," which was a means of changing radio frequencies to keep enemies from decoding messages. Today, Lamarr's concept is the basis of wireless technology, which is used for everything from Bluetooth and Wifi to satellites and wireless phones.

Adapted from <https://www.biography.com/people/hedy-lamarr-9542252>

Timothy Berners-Lee was born on 8 June 1955 and grew up in London. He studied physics at Oxford University and became a software engineer. In 1980, while working at CERN, the European Particle Physics Laboratory in Geneva, he first described the concept of a global system, based on the concept of 'hypertext', that would allow researchers anywhere in the laboratory to share information. In 1989, Berners Lee published a paper called 'Information Management: A Proposal' in which he married up hypertext with the Internet, to create a system for sharing and distributing information not just within a company, but globally. He named it the World Wide Web.

Adapted from http://www.bbc.co.uk/history/historic_figures/berners_lee_tim.shtml





Jacques Cousteau (1910-1997) was a French undersea explorer, environmentalist, and innovator. In 1943, Cousteau and the French engineer Emile Gagnan invented the aqualung, a breathing apparatus that supplied oxygen to divers and allowed them to stay underwater for several hours. Cousteau traveled the world's oceans in his research vessel "Calypso," beginning in 1948. Cousteau's popular TV series, films and many books [including "The Living Sea" (1963), and "World Without Sun" (1965)] exposed the public to the wonders of the sea.

Adapted from <https://www.enchantedlearning.com/inventors/1900a.shtml>

Patty Billings was a sculptor. She initially wanted to create a hard cement to prevent her sculptures from breaking in the 1970s. After years of experimenting, she finally achieved her goal of making an indestructible plaster. Imagine a building material that is indestructible, fire-proof and non-toxic. She called it the Geobond®. She continues to keep the exact recipe of Geobond® a secret.

Adapted from <http://www.women-inventors.com/Patricia-Billings.asp>

Thomas Alva Edison may be the greatest inventor in history. He has over 1000 patents in his name. He also started many companies including General Electric, which is one of the biggest corporations in the world today. He invented the phonograph (a machine to record and playback sound), the light bulb (he didn't invent it but made it practical, and also safety fuses and switches) and the motion picture (helping the progress of movies).

Adapted from https://www.ducksters.com/biography/thomas_edison.php

QUESTIONS

Explicit: What did each of them invent? What technological advances did they make?

Implicit: What did they do to help the world? What did they do to develop technology? What field of technology did they work in?

Referential: In your opinion, which is the most important invention for the human kind? If you had to choose one, which one would you choose?



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Activity 8

WHAT, WHEN AND WHO INVENTED...?

Collaborative activity for learn more about the content developed in these sessions
Each students upload an image of a invention, the name of the person who invented it and the year.

Padlet's link:

<https://padlet.com/1ESO1819/WHATWHENWHO>
(PASSWORD: inventions)

