

MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE



‘Youth, Multilingualism  
and Work Perspectives in Europe’ Project

# CLIL LESSONS

## VOLUME II

NEW

# TECHNOLOGIES



Erasmus+



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## ERASMUS + PROGRAMME

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## **‘YOUTH, MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE’ PROJECT**

In a context with a rising unemployment among young people and early school leaving, our schools have an important role to play. Young people need to be flexible to a new labour market with quickly changeable skills. Multilingualism, e-skills and knowledge of the European labour market are essential for youth.

‘Youth, multilingualism and work perspectives in Europe’ project intended to reach this aim by emphasizing the importance of motivational strategies and ‘coaching’, both to promote academic excellence and to achieve a successful job profile, encouraging students in key skills to enter the workplace. Thus, we developed language competences and digital skills by promoting the use of Content and Language Integrated Learning (CLIL) in our schools and ICTs in the job search process. As a result, we enhanced learning and using foreign languages as a necessary means for integration into the European labour market and we analysed the possibilities to work abroad and raised awareness in the students about the importance of education and training in labour world. We also promoted the participation of socially disadvantaged students in the school's activities, giving them access to ICTs.

Our partnership worked to modernize our schools and adapt them to new ways of teaching and learning. It was about cultivating the notion of European citizenship through the study of laboral possibilities in Europe. The students were involved with activities that made them acquire knowledge on their labour market and the skills they need to find work in Europe. They developed skills in ICTs, language learning and speaking in public by presenting their tasks in English and they shared their material through eTwinning. Simultaneously, teachers prepared CLIL lessons about many areas: History, Science, Technology, Arts, ...

There were jointly produced products: the present e-book with CLIL lessons, a webpage with the study of the labour market in Europe and videos and all the products made by students. Throughout the two years, there were meetings in the different countries involved on the project where students showed their tasks and products. Finally, there was an evaluation plan with questionnaires, group discussions, observation and analysis, which was performed by students and teachers in progress of the project and in the end.







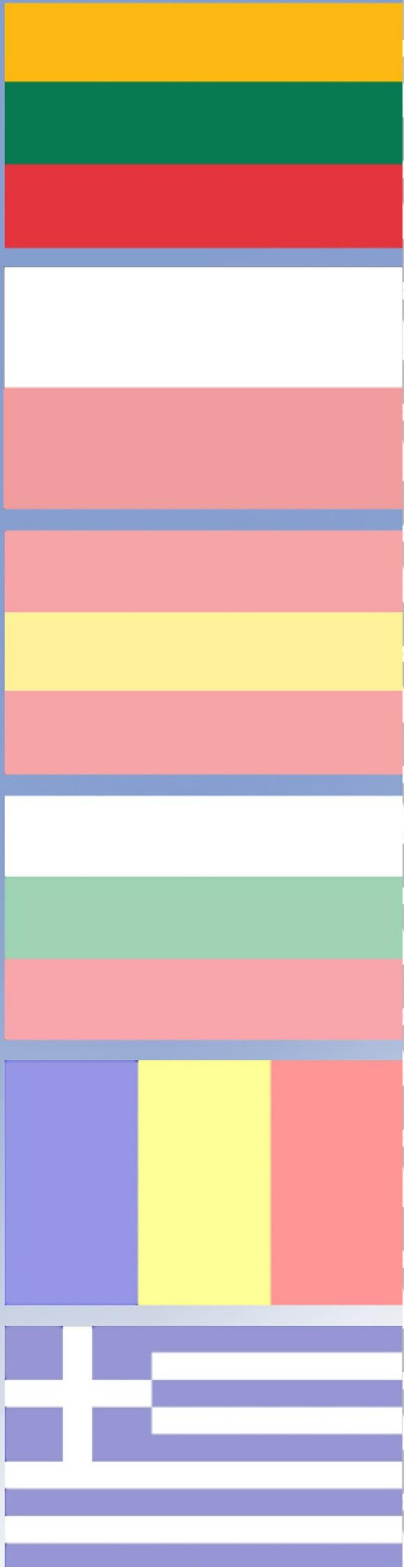
# CLIL LESSONS

## VOLUME II

### NEW TECHNOLOGIES

MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE





**LITHUANIA**



**LASERS**

MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE



# CLIL LESSON GENERAL LAYOUT

## 1.- TITLE OF THE UNIT

LASERS

## 2.- STUDENTS' LEVEL/AGE

Secondary School (12 - 15) Pre-Intermediate, Mixed Ability Class

B1 according to CEF (Common European Framework)

## 3.- GROUP SIZE

25 students in class (5 pupils in a group)

## 4.- TIMING

40 – 45 minutes

## 5.- PLACE

Computers' Lab

## 6.- THE AIM

To deepen knowledge about lasers.

## 7.- OBJECTIVES

- Getting acquainted with the types of lasers.
- Finding out which areas of life, they can be used.
- Figuring out what place in the European and world market Lithuania lasers are spread.
- Analyzing the Lithuanian higher education proposed by the specialties that are required to work with lasers.
- Accessing to the ELI project.
- Enriching vocabulary related to New Technologies branch ‘Lasers’.

## 8.- DETAILED SESSION

### PROCESS

1. Teacher introduces the lesson topic. Students get the papers, which they can use to write major notes and focus on watching a presentation. (5 min.)
2. Prezi presentation (8 min.).
3. The teacher makes 5 groups of students.
4. Working groups: creation of posters (15 min.). Students receive an envelope containing specified tasks.
5. Students work presentation, discussion and evaluation (15 min.).



## ACTIVITIES

**Poster topics:** 1. The use of lasers; 2. Project Eli; 3. Lithuanian high school and lasers; 4. Laser types; 5. The laser market.

### Tasks for students

<b>1. Types of lasers</b>	1.	
	2.	
	3.	
	4.	
	5.	
	6.	
<b>2. Laser areas</b>	1.	
	2.	
	3.	
	4.	
	5.	
	6.	
<b>3. Scientific institutions involved in the development of laser technologies</b>	1.	1.
		2.
		3.
		4.
	2.	1.
		2.
		3.
	3.	1.
		2.
	4.	1.
		2.
	5.	1.
2.		
<b>4. Extremely powerful laser laboratories will be built in.....</b>	1.	
	2.	
	3.	
	4.	

## **Tasks for groups**

### **Activity 1. Title - Use of Lasers.**

#### **Task:**

1. The figures would select those that portray the use of laser and bundle them by area;
2. For each illustration select the correct profile and glue.
3. Prepare a presentation about the use of lasers in various fields.

### **Activity 2. Title - Lithuanian high school and lasers.**

#### **Task:**

1. Work with the scheme: join the proper locations, school logos and names of professions.
2. Using the table data, draw a bar chart that depicts professionals working with lasers labor market growth.
3. Prepare a presentation on learning Lithuanian institutions of higher education and the labor market growth.

### **Activity 3. Title - Laser Types.**

#### **Task:**

1. The figures given by the selection of the one portrayed in the laser industry;
2. For each type of laser adjust the appropriate profile;
3. Prepare a presentation that describes the type of laser.

### **Activity 4. Title- Laser Market.**

#### **Task:**

1. Using table data, draw a bar chart, which is depicted in laser sales growth;
2. According to the table data, cemented pie charts on the map on the respective continents.
3. Prepare a presentation on the growth of sales of lasers and laser Lithuanian exports to the respective continents.

### **Activity 5. Title - project 'ELI'**

#### **Task:**

1. Select the national flags whose countries will built laser centers. Mark them in the map 3 (+1) countries.
2. On the poster must be seen the answers to these questions:
  - a. What is ELI?
  - b. What year is planned to start the project?

- c. Is Lithuania related to this project?
- d. The main objective of the project.
- e. Why laser laboratories will be built in three European countries?

## 9.- ASSESSMENT

Students are evaluated and reflection is done orally.

## 10.- SOURCES

- <https://prezi.com/d1j8tjam22uj/clil-lesson-about-new-technologies-in-lithuania-lasers/>



**POLAND**



**GENETIC  
ENGINEERING  
THE FIRST STEP IN  
BIOTECHNOLOGY**

# CLIL LESSON GENERAL LAYOUT

## 1.- TITLE OF THE UNIT

GENETIC ENGINEERING - THE FIRST STEP IN BIOTECHNOLOGY

## 2.- SUBJECTS

Biology, Technology, Industry, ICT

## 3.- STUDENTS' LEVEL/AGE

13-16 years old

## 4.- OBJECTIVES

4.1. Content objectives:

- 1) I know the basic knowledge of genetic engineering.
- 2) I know where in the industry the biotechnology is used to.
- 3) I know what are advantages and disadvantages of biotechnology.
- 4) I know new technological application.

4.2. Language objectives:

New vocabulary concerned with genetic engineering and biotechnology, its products, kinds of occupations, advantages and disadvantages of biotechnology, new information about computer technology - google documents (drawing, form) vocabulary, zapatio.com, kahoot.it, voice reader apps: read & write for google chrome, speakit, (optional) instaling - platform for language learning.



## 5.- ACTIVITIES

Individual work, group work, brainstorm, working on tablets or smartphones, google documents (drawing, document, form), youtube, zapnation platform, kahoot, instaling - platform for language learning - homework.

## 6.- DETAILED SESSIONS

- Presented the aims?
- Brain storm - what is genetic engineering and biotechnology?
- Activities 1-5.
- Revision - Summary of the lesson: What was the aim of the lesson?

## 7.- ASSESSMENT

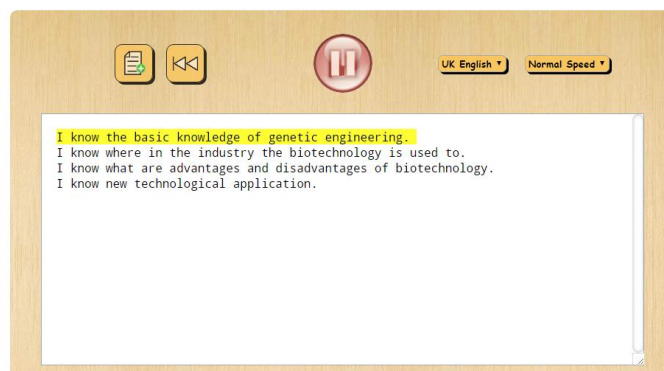
Online test (google forms) show and give points, kahoot.it

## 8.- DETAILED PLAN

**Welcome the class.**

**AIM. (PRESENTATION)** - Give the objectives for the lessons shown with read&write application or <http://ttsreader.com/>.

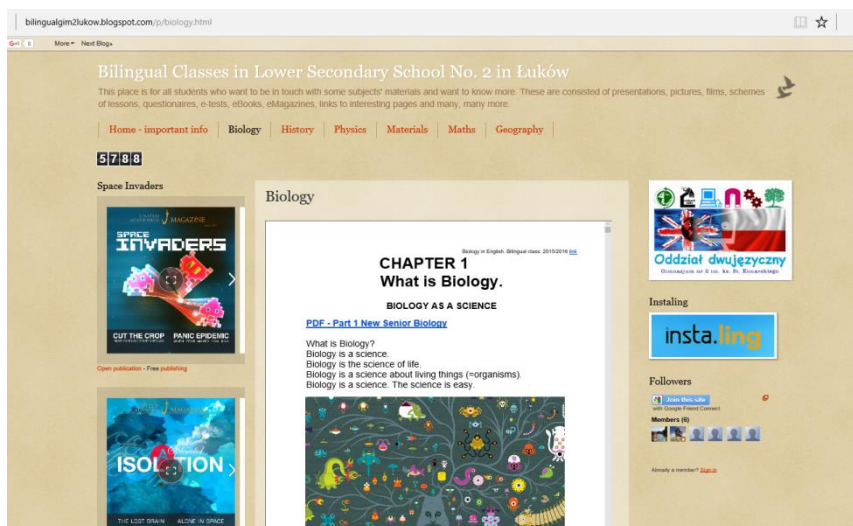
- I know the basic knowledge of genetic engineering.
- I know where in the industry the biotechnology is used to.
- I know what are advantages and disadvantages of biotechnology.
- I know new technological application.



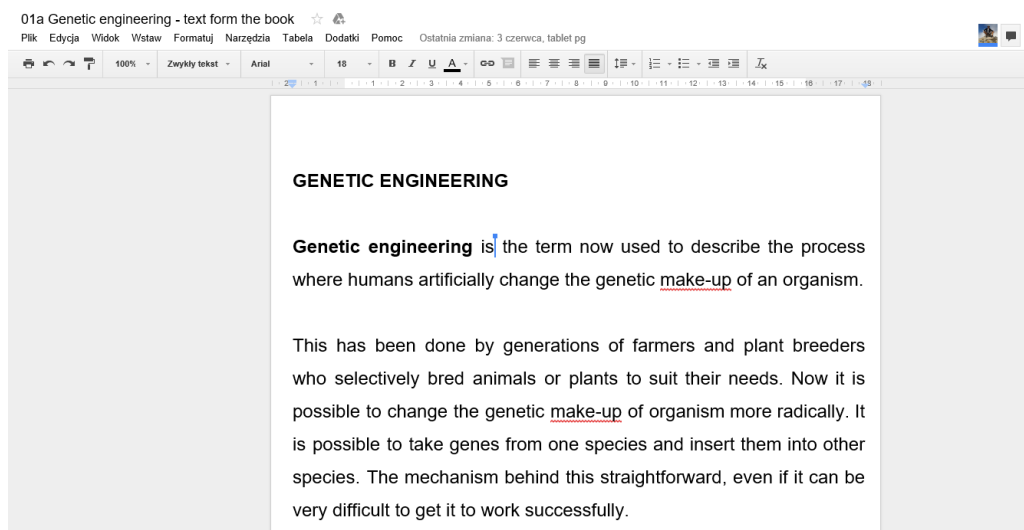
**BRAINSTORM** - What do you know about genetic engineering? Make a list of words on the piece of paper connected to this subject. You have got 1 minute for it.

After 1 minute every student says the written words, but not more than one of them. Students say words one by one but they are careful and cannot repeat the words said before. Teacher writes the first letters of the words on the board. After all one student repeats all the words.

**Activity 1** - Go to Chapter 14 in the [ebook](http://bilingualjim2lukow.blogspot.com/p/biology.html)<sup>1</sup> on your tablets and read and listen the paragraph of genetic engineering on pages 159-160.



a. While listening and reading try to remember the correct order of [example](https://docs.google.com/document/d/1-qWlsLGGXtqKhHza8Scm-Q5smy0VciZJ392ad0N4JmE/edit?pref=2&pli=1)<sup>2</sup> of the production of transgenic bacteria that produce human growth hormone.



<sup>1</sup> <http://bilingualjim2lukow.blogspot.com/p/biology.html>

<sup>2</sup> <https://docs.google.com/document/d/1-qWlsLGGXtqKhHza8Scm-Q5smy0VciZJ392ad0N4JmE/edit?pref=2&pli=1>

b. Please, go to this [document](#)<sup>3</sup> and match the definition (NUMBERS) to the word (LETTERS) make some notes in a piece of paper. You have got 8 minutes. Let's check now.

04 Biotechnology - document 1 ☆

File Edit View Insert Format Arrange Tools Table Help Last edit was on 20 February

1) a genetically determined characteristic (feature)

2) the process where humans artificially change the genetic make-up of an organism

3) change in character or composition, typically in a comparatively small but significant way (modify)

4) excessive (too much) gratification of one's own desires

5) a thick mass of coagulated liquid, especially blood cells, stuck (clot) together

6) to produce or increase (animals/plants) by sexual reproduction e.g. breed cattle

7) is a small DNA molecule within a cell that is physically separated from a chromosomal DNA/RNA and can replicate independently. They are most commonly found in bacteria as small, circular, double-stranded DNA molecules;

A) alter

B) trait

C) genetic engineering

D) clot

E) breed

F) plasmid

G) self-indulgence

NutritionFacts.org

**Activity 2** - Take a look into this [document](#)<sup>4</sup> and put the following steps (of the simple process of production of transgenic bacteria) in the correct order. When you are ready, one student comes and reads the correct order (go to Tools; press Voice typing procedure). You have got 5 minutes. Make some notes in the piece of paper.

03 Biotechnology - document 2 ☆

File Edit View Insert Format Tools Table Add-ons Help All changes saved in Drive

Spelling...  
Research Ctrl+Alt+Shift+I  
Define Ctrl+Shift+Y  
Document outline Ctrl+Alt+A Ctrl+Alt+H  
Word count Ctrl+Shift+C  
Voice typing... Ctrl+Shift+S  
Translate document...  
Script editor...  
Preferences...  
Personal dictionary...

the process of production of transgenic bacteria  
that produce human growth hormone.  
the correct order

A) The transformed bacteria makes many copies of the plasmid. These bacterial cells then express the human gene and make the human growth hormone.

B) The plasmid is then inserted into a bacterial cell.

C) A copy of this gene is isolated from human cells.

E) The gene is then inserted into a bacterial plasmid.

D) First, the gene for growth hormone is identified.

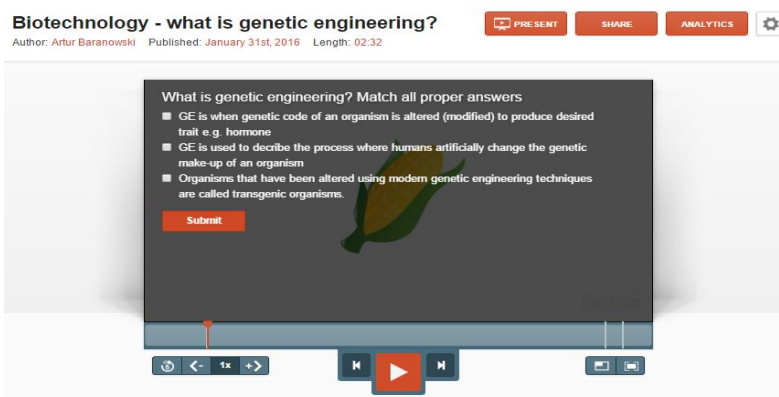
<sup>3</sup> [https://docs.google.com/drawings/d/1JDWXly\\_2xx9dELeMq06VJ36PQeobAT4hFiSBm2TkumA/edit?pref=2&pli=1](https://docs.google.com/drawings/d/1JDWXly_2xx9dELeMq06VJ36PQeobAT4hFiSBm2TkumA/edit?pref=2&pli=1)

<sup>4</sup> <https://docs.google.com/document/d/15TRwoLejLxES3HFHNFIDvMDa808UgWeUR-mUbigKYa8/edit?usp=sharing>

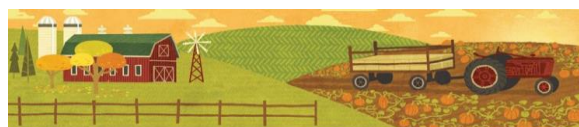
**Activity 3. Youtube film<sup>5</sup> and Zaption lesson<sup>6</sup>**



- Go to [www.zaption.com/join](http://www.zaption.com/join).
- Type in the code KX37V and then your name.
- While watching the film answer for the following questions in the film.
- You have got 5 minutes.



**Activity 4. Summary of the lesson - evaluation – Self assessment test<sup>7</sup>.**



**Biotechnology - genetic engineering.**

Choose the best answers.

\*Required

Name \*

What is genetic engineering? Match all correct answers. \*

- organisms that have been altered (modified) using modern genetic engineering techniques are called transgenic organisms.
- the process where humans artificially change the genetic make-up of an organism
- when genetic code of an organism is altered (modified) to produce desired trait e.g. hormone
- is the process of manually adding new DNA to an organism. The goal is to add one or more new traits that are not already found in that organism.

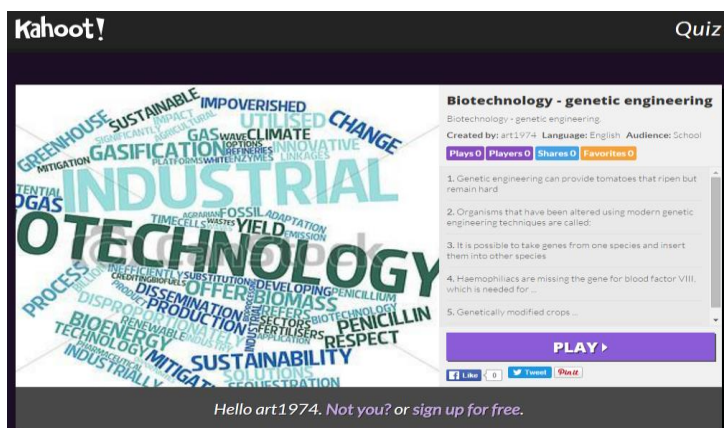
<sup>5</sup> <https://www.youtube.com/watch?v=3IsQ92KiBwM>

<sup>6</sup> <http://zapt.io/tfsw2ks6>

<sup>7</sup> <https://docs.google.com/forms/d/1Z-ltGAjb9N2zWqYcQ4PSf73xKLAOp8zLSklahDzuF7Y/viewform>



**Activity 5** - What was the aim of the lesson? Show the aims on presentation. Let's memorise<sup>8</sup> the findings in the lesson.



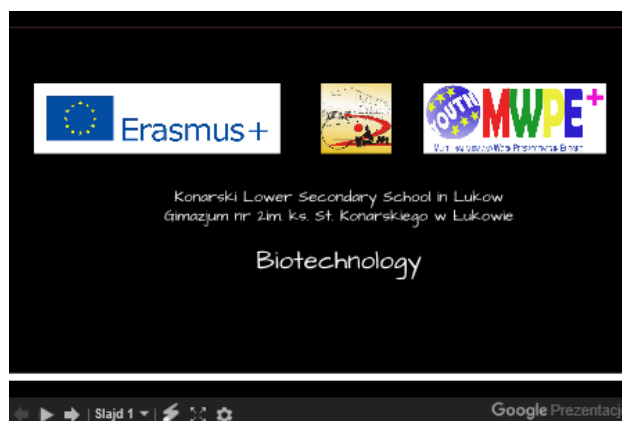
**Presentation of the results. Google form - Summary.**

**Homework (optional) - Summary.**

a. Instaling platform<sup>9</sup> for language learning - Do 5 sessions during the following week.



b. Student's presentations<sup>10</sup>. Make 5 questions to the chosen film made by the students and answer for them.



<sup>8</sup> <https://play.kahoot.it/#/k/c31a8383-cea5-4a70-bd17-0b6df94bd4aa>

<sup>9</sup> <http://www.instaling.pl/>

<sup>10</sup> <http://workperspectivesineurope.gim2.lukow.pl/index.php/clil/biotechnology/>



## Some interesting materials

- [http://www.reportlinker.com/report/best/keywords/Biotechnology?utm\\_source=adwords1&utm\\_medium=cpc&utm\\_campaign=Biotechnology&utm\\_adgroup=Biotechnology&gclid=CjwKEAiAws20BRCs-P-ssLbSlg4SJABbVcDp7OT5OoHjfYfrmiiIXjGDNAihlPpaCIIt2s\\_tIJ8dBrhoCi4Dw\\_wcB](http://www.reportlinker.com/report/best/keywords/Biotechnology?utm_source=adwords1&utm_medium=cpc&utm_campaign=Biotechnology&utm_adgroup=Biotechnology&gclid=CjwKEAiAws20BRCs-P-ssLbSlg4SJABbVcDp7OT5OoHjfYfrmiiIXjGDNAihlPpaCIIt2s_tIJ8dBrhoCi4Dw_wcB)
- <https://www.pmrpublications.com/press-releases/175/pharmaceutical-biotechnology-in-poland-industry-expected-to-boom-in-2011>
- <http://www.statista.com/topics/1634/biotechnology-industry/>
- <http://www.statista.com/forecasts/396805/spain-biotechnology-r-d-revenue-forecast-nace-m7211>
- <http://www.oecd.org/sti/biotech/1947629.pdf>
- <https://www.youtube.com/watch?v=N7MWqXdWe0Q>
- <https://www.youtube.com/watch?v=exiC8xzEwIw>
- **SUPER:** <https://www.youtube.com/watch?v=SnkHmwTKksQ>
- <https://www.youtube.com/watch?v=4xMPQh0pZoE>



**SPAIN**

**NEW TECHNOLOGIES  
IN EDUCATION**



# CLIL LESSON GENERAL LAYOUT

## 1.- TITLE OF THE UNIT

NEW TECHNOLOGIES IN EDUCATION

## 2.- SUBJECTS

Technology, computer science, natural science

## 3.- STUDENTS' LEVEL/AGE

16-year-old students

## 4.- OBJECTIVES

4.1. Content objectives:

- 1) Understanding the use of graphene in making new computers.
- 2) Researching through a WebQuest about endangered species.
- 3) Sharing files by Google Drive.
- 4) Communicating by Hangout On Air.
- 5) Doing a presentation of a report about endangered species.
- 6) Elaborating an app.
- 7) Creating a portfolio.
- 8) Uploading the task online.

4.2. Language objectives:

- 1) Acquiring specific vocabulary regarding the use of graphene in computers.
- 2) Acquiring specific vocabulary regarding the topic of the WebQuest.
- 3) Acquiring specific vocabulary regarding the use of Google Drive.
- 4) Acquiring specific vocabulary regarding the elaboration of an app and a portfolio.

5) Developing reading and listening comprehension in English.

6) Developing oral and written expression in English.

## **5.- ACTIVITIES**

Vocabulary related with the topic of each session (multiple choice activities, scatter, games,...), reading comprehension ( texts, ...), listening comprehension (videos), searching information activities, oral expression ( individual and group speaking activities, debates...), written expression ( answering questions,...), using new technologies.

## **6.- DETAILED SESSIONS**

In our opinion, teaching is a process where the role of the teacher is to guide pupils in order to develop their capacity of learning by themselves, to be curious, to be autodidact, develop their autonomy, encourage teamwork and disseminate their tasks.

New technologies can help us in our teaching task in the following ways:

- Motivate
- Research
- Create
- Teamwork
- Disseminate the tasks

So, we designed 5 sessions where new technologies can help us in our teaching task.



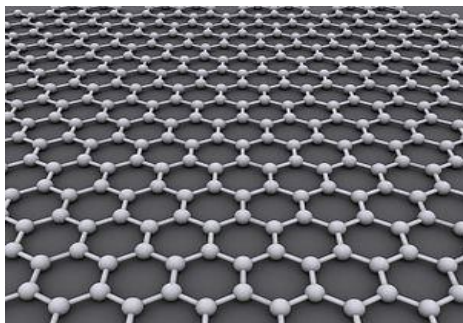
## DETAILED SESSIONS

### Session 1. Motivate - *Could new technologies help us to motivate?*

Activity 1.- Do you imagine a school like [this](#)<sup>1</sup>?

Activity 2.- Graphene. A new material with important perspectives in the future.

#### 1.) What's Graphene?



Graphene is an allotrope of carbon in the form of a two-dimensional atomic scale, a honeycomb lattice in which each atom form a vertex. This organization is also the basic structural element of other allotropes of carbon, like graphite.

Graphene has many extraordinary properties. It is about 100 times stronger than the strongest steel. It conducts heat and electricity efficiently and is almost transparent.

2.) *Samsung, LG* and other well-known brands have already made prototypes using graphene as smartphones or tablets.

#### 3.) Uses

Flexible displays are an essential element of the new high-tech electronic devices. Graphene provides a more efficient alternative, the day create a fully collapsible screen. The layer of the base plate may be produced by a low temperature process in which graphene is essentially "printed" on the substrate.

Although flexible displays are appearing in electronic devices today, this is a low-cost, high-volume electronics. You may include LCD and OLED technologies to provide full color

capabilities of high speed video playback manageable enough to be used as high-density sensors for use in high resolution systems issues such as medical image recognition applications or very precise gestures.

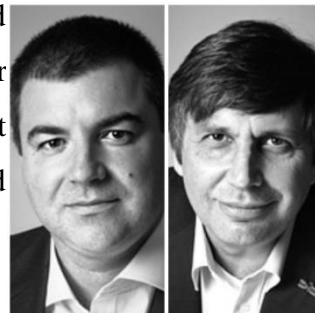


<sup>1</sup> <https://drive.google.com/file/d/0B80kIemhzV6PUjVYYTgwRTY0Sm8/view>



#### 4.) Awards

In the year 2010, the Royal Swedish Academy of Sciences has awarded with the Nobel of Physics to Andre Geim and Konstantin Novoselov for his pioneering work in the development of graphene. That's a signal that indicates that we're going forward with the handling of this material and that it will be the future's material.



The developed text is in this [Prezi](#)<sup>2</sup> presentation with questions about the text and vocabulary activities.

#### Suggested development of the session

After watching the introductory video, pupils may debate what this technology suggests them and if these computers could motivate them and improve the learning process in the future. This part would take 20 minutes.

After this, pupils would read a text, answer some questions about the graphene and do a vocabulary activity to check if they understood the main words used in this topic. All this part is completely developed in the Prezi presentation. This part would take 35 minutes.

<sup>2</sup> <https://prezi.com/enouwhtriqu8/labor-market-in-spain/>

**Session 2. Research- Do new technologies stimulate research?**

In this session we will use a common tool to research online. We can use different webquests depending on the topic that we are interested in working.

We are going to do a WebQuest about endangered animals.



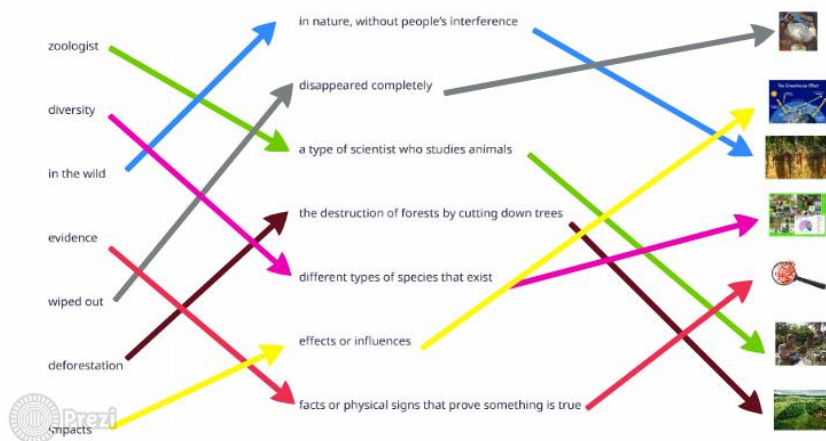
**Activity 1.- What do you think about the following pictures<sup>3</sup>?**

**Activity 2.- Vocabulary related to endangered animals:**

<b>species</b>	set of animals or plants that are similar to each other and can breed together.
<b>extinction</b>	the situation where something doesn't exist any more
<b>endangered</b>	under threat of not existing anymore; dying out
<b>drastically</b>	something which happens suddenly and with a very obvious effect
<b>poaching</b>	capturing and killing animals illegally
<b>natural hábitat</b>	region in which animals or plants normally live
<b>critically endangered</b>	facing an extremely high risk of extinction without human help
<b>in the wild</b>	in nature, without people's interference
<b>wiped out</b>	disappeared completely
<b>zoologist</b>	a type of scientist who studies animals
<b>deforestation</b>	the destruction of forests by cutting down trees
<b>diversity</b>	different types of species that exist
<b>impacts</b>	effects or influences
<b>evidence</b>	facts or physical signs that prove something is true

<sup>3</sup> [http://prezi.com/o3rcvcbgvjfy/?utm\\_campaign=share&utm\\_medium=copy&rc=ex0share](http://prezi.com/o3rcvcbgvjfy/?utm_campaign=share&utm_medium=copy&rc=ex0share)

Let's check we understood the key words by doing these vocabulary activities<sup>4</sup>.



### Activity 3.- Let's research about endangered animals.

We adapted this WebQuest<sup>5</sup>:

#### Endangered animals

##### Introduction:

There is still time!!! Endangered means a species numbers are limited and if efforts to save them are not soon put in place some of our favorite animals will be gone forever! You and your classmates will become experts on many different species of endangered animals. Your team will work cooperatively to learn about the physical characteristics, special adaptations, and habits of a particular animal. The team will determine if these traits contribute in any way to the species being endangered. Your team will use important resources online to learn all about endangered animals. Each person on your team will complete one piece of research and work together to gain a better understanding of why time is running out for certain species.

##### The Quest:

Your team of conservationists are trying to inform the public about the problems endangered species face and the possible solutions to these problems. You have been hired by the Times Running Out Foundation to research the physical characteristics, special adaptations, and habits that affect the endangered status of certain species. In order to educate the public at many important meetings, your team must prepare an informative presentation.

Your team is formed by 3 people that work at different countries: a zoologist, an environmentalist and a conservationist.

<sup>4</sup> [https://prezi.com/t99bbzppfum/endangered-species/?utm\\_campaign=share&utm\\_medium=copy](https://prezi.com/t99bbzppfum/endangered-species/?utm_campaign=share&utm_medium=copy)

<sup>5</sup> [http://seekonk.sharpschool.com/Webquests/Endangered\\_Animals](http://seekonk.sharpschool.com/Webquests/Endangered_Animals)

**The Process:**

**Step 1.**

Watch the following [video](#)<sup>6</sup> about protecting animals and answer the quiz about the video in order to be familiar with the importance of animal protection.



**Step 2.**

You will work in small groups to research many important facts about an endangered species.

First, you will choose an animal using the following online [list](#)<sup>7</sup>. You have to choose an endangered animal species in a defined area.

Later, you will write a summary to the questions assigned to your group.

*Zoologists:* Physical Characteristics and special adaptations.

What does your animal look like?

Size of males and females.

Outer covering (for example fur, feathers, scales, wings, patterns or colors, teeth, tusks)

What special physical adaptations does your animal have to help it survive in its ecosystem?

*Conservationists:* Reasons for being endangered and conservation efforts

What are the reasons why there are low numbers of your species?

<sup>6</sup> <http://www.bbc.co.uk/learningenglish/spanish/course/intermediate/unit-17/session-4>

<sup>7</sup> <http://www.earthsendangered.com/continent6M.html>

*Environmentalists: Habitat and Habits.*

Where in the world does this species live?

What type of environment do they live in? (for example; mountains, forest, pond)

Why do they live in this type of environment?

What type of home does the animal have? (for example; nest, cave)

What does this species eat?

Where does it get its food from?

Is it a consumer or a producer?

### **Step 3.**

You will write a report in a text file, using pictures in order to illustrate the information

Suggested development of the session

This session would take two lessons of 55 minutes each one.

Firstly, we would show pupils the Prezi presentation with pictures about threatened ecosystems and they would tell us sentences that images would suggest them.

After this, we would work on the vocabulary used in this important ecological problem as a prior step to understand it through two activities included in the Prezi presentation. This part would take 20 minutes.

Then, pupils would watch the video and they would answer the quiz about it in order to understand the magnitude of this ecological problem. This part would take 35 minutes.

Later, every team would choose an endangered animal and we would distribute roles to each pupil. There would be a zoologist, a conservationist and an environmentalist in every team, the group would work on the same endangered species. So, they would form a team of three members. Finally, every pupil would write a report in a text file, answering the questions and using pictures in order to illustrate the information. This part would take 55 minutes.



### Session 3. Encourage teamwork.

In this session we will teach pupils to use Google Drive in order to share files online. Moreover, they will learn to communicate through videoconferences in YouTube.

#### Activity 1.- Vocabulary related to google drive

We can know the meaning of the key words and its pronunciation by using the following [web](#)<sup>8</sup>.

Word Processing	Microsoft Word (.doc, .docx)	☆ 🔊
Spreadsheets	Microsoft Excel (.xls, .xlsx)	☆ 🔊
Presentations	Microsoft Powerpoint (.ppt, .pps)	☆ 🔊
File formats	Easily import and store any file format	☆ 🔊
Sharing settings	Who can make changes or only view the document	☆ 🔊
Owners	Can edit documents, spreadsheets, presentations, and drawings, and invite more editors and viewers.	☆ 🔊
	Can delete documents, spreadsheets, presentations, and drawings, and thereby remove access for editors and viewers.	
Google Apps for Education	Pulaski Academy & Central School is a participant in this Educational group - which allows our students secure tools to collaborate & share.	☆ 🔊

Activity 2.- Do you know the different uses of google drive? You can watch the following [flashcards](#)<sup>9</sup>.

🔊 ★

Web-based allows access to your files from any internet browser & safely stores documents online, making them accessible to authorized users from any computer or mobile device, whenever they're needed.

⏪ 2 of 15 ⏩  
Keyboard Shortcuts

<sup>8</sup> <https://quizlet.com/16528093/google-drive-vocabulary-flash-cards/>

<sup>9</sup> <https://quizlet.com/16528093/flashcards>

**Activity 3.- Let's check if we understood it by doing multiple choice activities.**

1. It can edit documents, spreadsheets, presentations, and drawings, and invite more editors and viewers. It can delete documents, spreadsheets, presentations, and drawings, and thereby remove access for editors and viewers.

- a) File formats
- b) Auto save
- c) Owners
- d) Templates

2. Microsoft Excel (.xls, .xlsx)

- a) Templates
- b) Spreadsheets
- c) Presentations
- d) File formats

3. It easily imports and stores any file format.

- a) Spreadsheets
- b) File formats
- c) Owners
- d) Templates

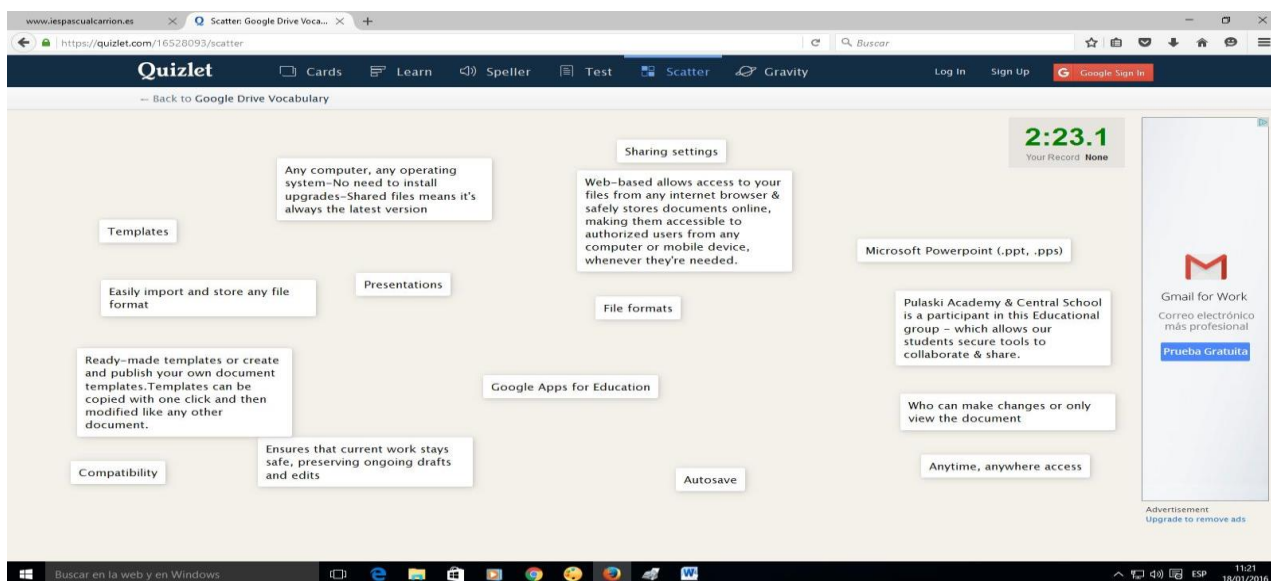
4. Microsoft PowerPoint (.ppt, .pps)

- a) File formats
- b) Templates
- c) Spreadsheets
- d) Presentations

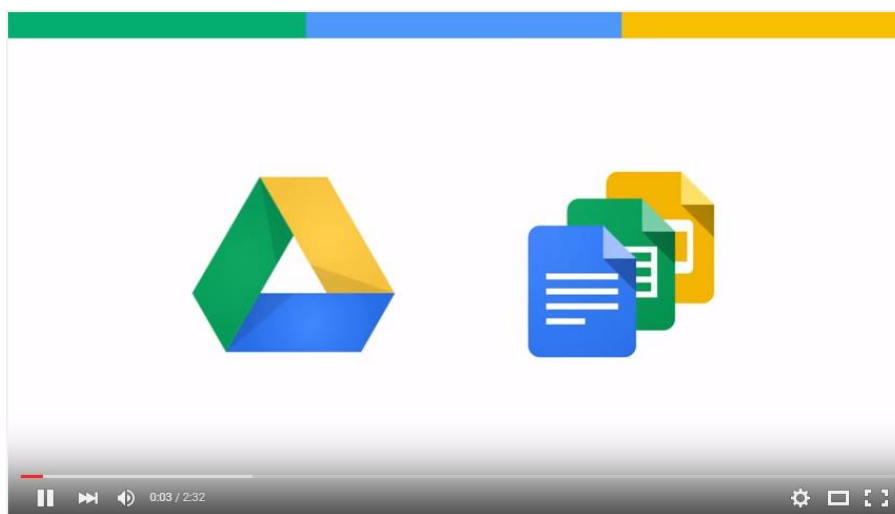
5. It makes it easy to review, compare, or revert to a prior version at any point

- a) Compatibility
- b) Spreadsheets
- c) Presentations
- d) Revision history

**Activity 4.- Let's check if we understood it with a scatter activity<sup>10</sup>.**



**Activity 5.- Do you know how to improve Google Drive use<sup>11</sup>?**



**Activity 6.- Let's share documents by google drive.**

The zoologist, environmentalist and conservationist of every team will share the report about the endangered species in order to prepare a unique report.

<sup>10</sup> <https://quizlet.com/16528093/scatter>

<sup>11</sup> <https://www.youtube.com/watch?v=25CtYkqamIA&feature=youtu.be>

### Activity 7.- Let's agree on how to protect the endangered species by using a videoconference by Hangout On Air with YouTube.

Zoologists, environmentalists and conservationists are working in different countries. So, they will need to use Hangout On Air with YouTube in order to communicate their findings and agree on how to protect the selected species. We obtained the information about the use of Hangout On Air in this [page](#)<sup>12</sup>.

#### Start or schedule a Hangout On Air

1. On your computer, go to <https://plus.google.com/hangouts/onair>.
2. Click **Create a Hangout On Air**.
3. Type a name and a description.
4. Choose a start time:
  - **Now:** Start the Hangout On Air immediately after you create it.
  - **Later:** Fill in the date and time when you want your Hangout On Air to start.
5. Choose your audience. This is the audience that can see the Hangout On Air.
  - For maximum reach, 'Public' is recommended.
  - Adding specific people and circles ensures they receive a notification.
  - If you don't want your Hangout On Air to be widely publicized, you can also [make your event unlisted](#)<sup>13</sup>.
6. Click **Share**.

We can watch an [example](#)<sup>14</sup> of a hangout by YouTube elaborated by pupils about how to protect an endangered animal.

#### Activity 8: The international meeting in Sax

All the researchers about endangered species have an international meeting. So, every team will present an oral report to other classmates in order to share with them their findings about an endangered animal. Every team will prepare a presentation by using PowerPoint or Prezi.

We can see an [example](#)<sup>15</sup> of a presentation done by Prezi about an endangered animal.

We can watch a [video](#)<sup>16</sup> about the oral presentation carried out by this team in class.

<sup>12</sup> <https://support.google.com/plus/answer/4386744?hl=en>

<sup>13</sup> <https://support.google.com/plus/answer/4646402>

<sup>14</sup> <https://youtu.be/VhCo5okHt4g>

<sup>15</sup> [http://prezi.com/2d\\_2a5wbyq7e/?utm\\_campaign=share&utm\\_medium=copy&rc=ex0share](http://prezi.com/2d_2a5wbyq7e/?utm_campaign=share&utm_medium=copy&rc=ex0share)



## Suggested development of the session

This session would take four lessons of 55 minutes each.

We would start learning the vocabulary used in Google Drive as a prior step to understand it, in addition to this, pupils would listen to the word and its definition by pressing the button on the right. We would ask pupils if they know the meaning of each word, if they didn't know it, we would try to help them to find it out by using related words, and synonyms and so on. This part would take 10 minutes.

Then pupils would read the flashcards in 5 minutes. Activities 3 and 4 try to check if pupils understood the meaning of the flashcards. It would take 10 minutes.

Later, pupils would improve the use of Google Drive by following the instructions of the activity 5. It would take 15 minutes.

Later, every pupil would share the elaborated files as a conservationist, a zoologist and an environmentalist of the same endangered species by Google Drive. Then, they would edit this document in order to present the task together. It would take 20 minutes and we would finish the first lesson.

On the other hand, the members of each team would agree on the measures to protect the endangered species using Hangout On Air with YouTube. It would take 20 minutes.

After this, every team would prepare a presentation in order to explain the task to the rest of the classmates. It would take 35 minutes of the second lesson and 20 minutes of the third lesson.

Finally, every team would explain their task in 10 minutes. It would take 35 minutes of the third lesson and 55 minutes of the fourth lesson.

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<sup>16</sup> <https://youtu.be/TUreSiF38I>

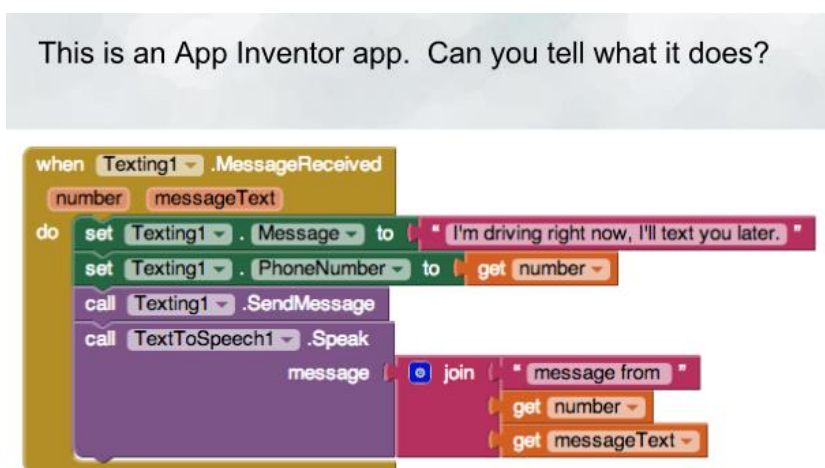
We would assess the session 2 and 3 using the following checklists:

Can pupils do it?. (1=no; 2= They had problems with this; 3= OK; 4= Very well)

	1	2	3	4
Questionnaire of the video				
Research Report				
Research Report				
Written Report				
Communication by Hangout On Air				
Proposal measurements to protect the animal				
Prezi or Powerpoint presentation				
Oral Presentation				

#### Session 4. Create.

In this session we will lead pupils to create by using new technologies. Pupils will create an app by using [Appinventor](http://www.appinventor.org)<sup>17</sup>.



This is the webpage of the course from where we adapted the lesson:  
<http://www.appinventor.org/content/CourseInABox/Intro/itnroduction>.

<sup>17</sup> ai2.appinventor.mit.edu

In this lesson, you'll be introduced to App Inventor and learn the basics of app building. You'll learn how to design the user interface for an app, and how to code the blocks that specify the app's interactive behaviour. You'll learn how to code blocks that specify how an app responds to events, and you'll learn about conditional blocks that allow an app to make decisions. You'll build a mini-app from card instructions.

**Activity 1.- Do you know what you need to create the app?**

- Wi-Fi connection
- Computer
- Android device (phone or tablet)
- MIT AI2 companion app in the device
- Gmail account to use [ai2.appinventor.mit.edu](http://ai2.appinventor.mit.edu).

Though the Wi-Fi connection is the fastest and easiest way to use App Inventor 2, the tool does provide alternatives including connecting your phone to the computer with a USB cable and using an emulator. For help with either of these, please see the setup instructions on the MIT App Inventor site.

**Activity 2.- Choose a card and make a mini-app.**

Making an App

- The teacher shows how to make a mini-app with a card:

The teacher shows how to make a mini-app by using a card, then give each student a card (then the students can share the cards) or card set (the idea is that they choose the card that they like) and they have to try to make a mini-app.

- How to use the Cards

On the front of the card, there is a description of something you can do inside the App Inventor. The back of the card tells you what components and blocks to use.

### Activity 3.- Important windows to make the app (discussion questions)

1. App Inventor has two main windows. What are they and what do you do with them?
2. Testing and Installing an App:
  - How do you test an app while you're developing it?
  - How can you install an app you build to your phone?
  - What if you didn't have a phone, but wanted to program some apps. Could you? How?
3. Try to identify the following elements in a app:
  - visible component:
  - non-visible component:
  - property
  - event
  - event-handler
  - function call
  - conditional

Suggested development of the session:

First, we would start telling them the tools that they need to do the app. Then, we would explain them the windows and the useful components to do the app. This would take 5 minutes.

Later, we would show the card created by **App Maker Card** and they would build the app. This would take 45 minutes.

**App Maker card** provides mini introductions to interesting App Inventor components and functionality. They are great for exploring app building early in the learning process and as an alternative to following a step-by-step tutorial. The cards are in PDF form.



Finally we would discuss about some questions in activity 3 during 5 minutes.

This CLIL session is well developed in this online [page](#)<sup>18</sup>.

### Session 5. Disseminate the tasks.

In this session we will teach pupils to upload the task online after creating a portfolio

#### Activity 1.- Vocabulary related to portfolios

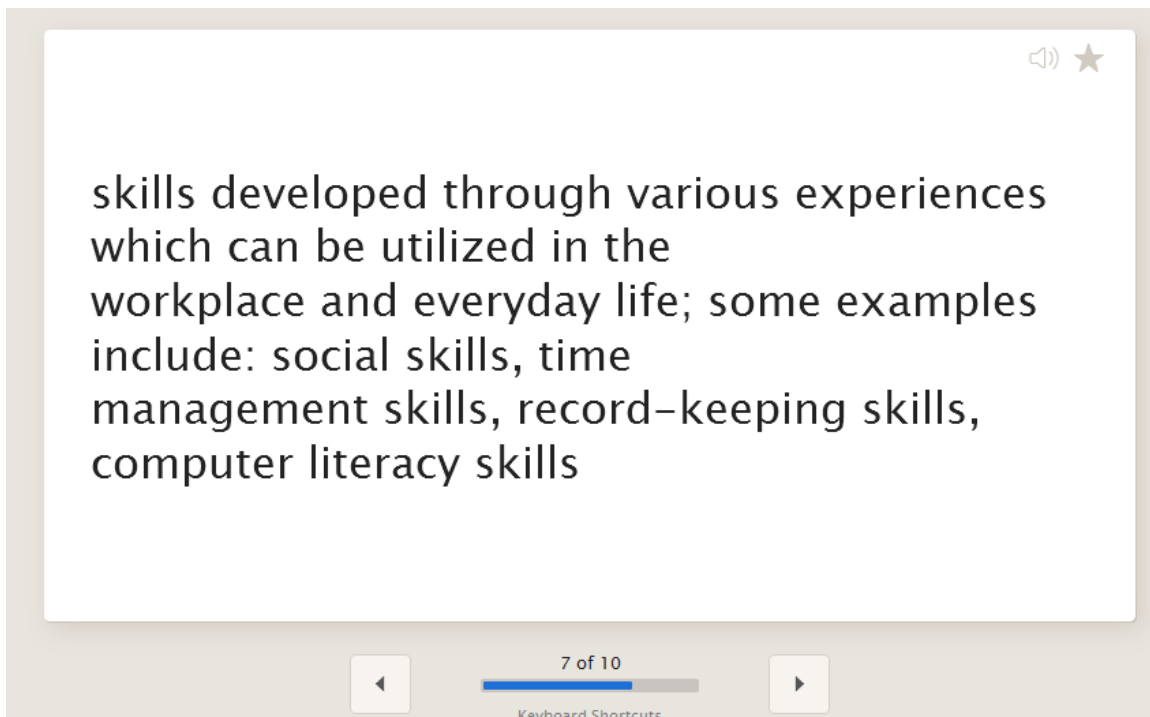
We can know the [meaning of the key words and its pronunciation](#)<sup>19</sup>.

Portfolio	personal and career plans; school and community accomplishments	☆ 🔊
Goals	an accomplishment you want to achieve	☆ 🔊
Special Interests	activities you enjoy; such as hobbies	☆ 🔊
Skills	what your abilities are	☆ 🔊
Electronic Portfolio	involves the use of electronic technologies; allows collection and organization of portfolio facts in many different media types	☆ 🔊
Hypertext Links	connects material to its appropriate goal and standard	☆ 🔊
Transferable Skills	skills developed through various experiences which can be utilized in the workplace and everyday life; some examples include: social skills, time management skills, record-keeping skills, computer literacy skills	☆ 🔊
Social Skills	any skill concerning communication and interaction with others	☆ 🔊
Time Management Skills	refers to the any tools or methods used when managing time effectively in an effort to accomplishing a task or reaching a goal	☆ 🔊

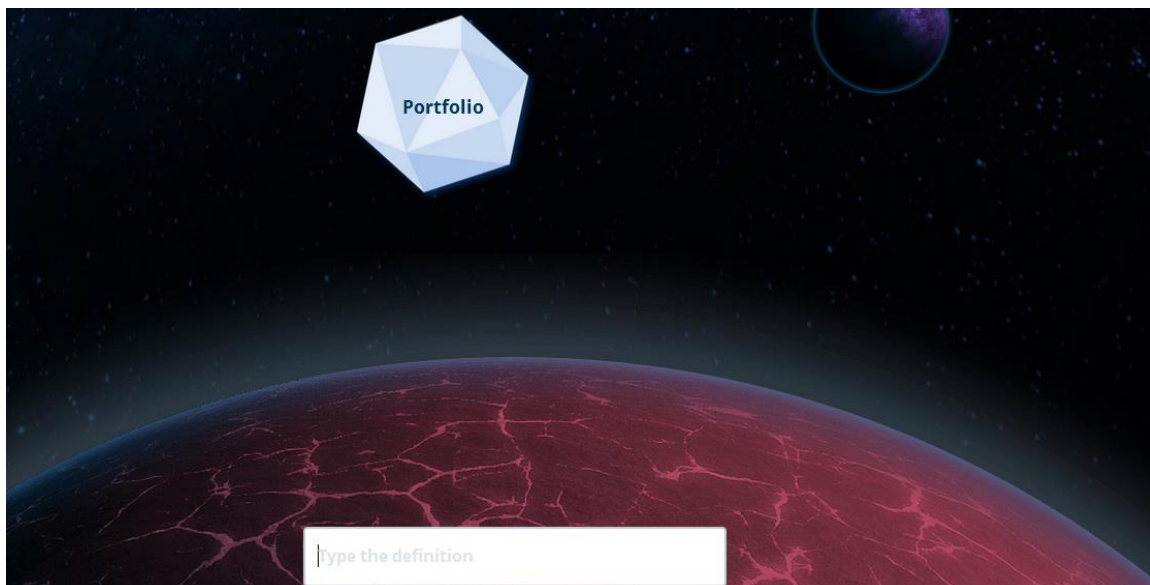
<sup>18</sup> <https://sites.google.com/a/iespascualcarrion.es/clilappinventor/>

<sup>19</sup> <https://quizlet.com/11744951/portfolio-vocabulary-flash-cards/>

Activity 2.- Do you know what a portfolio is? You can watch the following [flashcards](#)<sup>20</sup>.



Activity 3.- Let's check if we understood it by playing this [game](#)<sup>21</sup>.



<sup>20</sup> <https://quizlet.com/11744951/flashcards>

<sup>21</sup> <https://quizlet.com/11744951/gravity>

**Activity 4.- Let's check if we understood it with multiple choice activities.**

1. refers to the any tools or methods used when managing time effectively in an effort to accomplishing a task or reaching a goal
  - a.  Social Skills
  - b.  Record-Keeping Skills
  - c.  Time Management Skills
  - d.  Transferable Skills
  
2. what your abilities are
  - a.  Social Skills
  - b.  Goals
  - c.  Skills
  - d.  Portfolio
  
3. one's skill set concerning the ability to effectively operate a computer and its programs in a timely fashion in relation to completing a task
  - a.  Transferable Skills
  - b.  Social Skills
  - c.  Time Management Skills
  - d.  Record-Keeping Skills

**3 True/False questions**

---

1. Social Skills → what your abilities are
 

True     False
  
2. Electronic Portfolio → personal and career plans; school and community accomplishments

**Activity 5: Let's create a portfolio.**

<http://www.appinventor.org/content/CourseInABox/Intro/PortfolioHowTo>

1. In a browser, go to <https://sites.google.com> (if you don't have a Google account, get one).
2. Click on Create to create a new site.
3. In the section on 'select a template to use...'
4. Click on the 'Browse the gallery for more' link.
5. Then select 'Public' in the left-side-bar (not Featured).
6. Search for 'App Inventor'.
7. Select the 'Sample App Inventor Portfolio'.

8. Name your site. You'll need to have a globally unique name, so try something with your name in it, e.g., 'Wolber's App Portfolio'
9. When the site comes up, you'll see a sample profile. Change the pic and the info in the profile and provide a description of yourself suitable for this context.
10. The template has a table of apps with two sample apps shown. This is where you'll put pictures of the apps you create. As you create apps, replace the samples with screen snapshots and links to your own apps.
11. USF Students: You'll specify the work you do each week on "Checklist" pages within your portfolio. These are what the instructor and TA will check in grading your work each week. You should list and describe your work on the checklist pages, and link to other pages (where the work actually is).

We can watch a [portfolio](#)<sup>22</sup> created by pupils where they uploaded the report about the endangered animal.

#### **Activity 6: Let's upload the report of the WebQuest and the created app in the portfolio.**

Suggested development of the session

We would start learning the vocabulary used in portfolios as a prior step to understand it, in addition to this, pupils would listen to the word and its definition by pressing the button on the right. This part would take 5 minutes.

Then pupils would read the flashcards in 5 minutes.

Activities 3 and 4 try to check if pupils understood the meaning of the flashcards. It would take 10 minutes.

Later, pupils would create a portfolio following the instructions of the activity 5. It would take 30 minutes.

Finally, pupils would upload the report elaborated by the WebQuest and the app created by Appinventor. It would take 5 minutes.

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<sup>22</sup> <https://sites.google.com/site/josecarlosbeltranalpanes/>



We would assess the session 4 and 5 using the following checklists:

Can pupils do it? (1=no; 2= OK; 3= Very well)

	1	2	3
Apps			
Portfolio			



**BULGARIA**

**SOFTWARE  
INDUSTRY**



MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE

# CLIL LESSON GENERAL LAYOUT

## 1.- TITLE OF THE UNIT

SOFTWARE INDUSTRY

## 2.- SUBJECTS

Social Science – Geography, IT

## 3.- STUDENTS' LEVEL/AGE

Level: B1.2. / Age: 12-15

## 4.- OBJECTIVES

### CONTENT AIMS

### LANGUAGE AIMS

<ul style="list-style-type: none"> <li>-Learn about IT industry in EU.</li> <li>-Learn about the biggest software companies in the world.</li> <li>-Learn about labour market in IT industry in Europe.</li> <li>-Reflect on the importance of IT industry.</li> <li>- Learn about global trends in the ICT sphere.</li> <li>- Reflect on the importance of IT industry.</li> </ul>	<ul style="list-style-type: none"> <li>-Review and enrich vocabulary on different branches of software industry.</li> <li>-Review Simple PastTense.</li> <li>-Boost students awareness of the benefit of taking part in discussions.</li> </ul>
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**First five minutes:**

**Review:** refresh the vocabulary on Software topic.

**Advance organizer:** present the tasks for the lesson to get the students ready and familiar with the topic.

**Goal:** learn about the IT branches and their impact on the world economic.

**Resources:** students' presentations, video youtube, powerpoint presentation.

## 5.- ACTIVITIES

Reading texts and answering questions; activities with the worksheets provided: true or false activities, filling in gaps with grammatical tasks, filling in gaps with lexical tasks, watching a video and editing a text

**Anticipated problems/solutions:** Internet access- not available or other technical problems

## 6.- DETAILED SESSIONS

### Session 1.

**Activity 1.-** Short review of the main notions describing the software of a computer.

**Activity 2.-** An exercise on matching the notions with their definitions.

- |                     |  |
|---------------------|--|
| 1. ICT              | a) A set of information on a computer  |
| 2. Hardware         | b) The most basic unit of information that can be stored in a computer   |
| 3. Software         | c) Millions of computers linked together in a network that allows people all over the world to exchange information      |
| 4. Program          | d) A series of instructions that makes a computer perform an action or a particular type of work                         |
| 5. Internet         | e) Programs used by computers for doing particular jobs  |
| 6. Bit              | f) The software that tells the parts of a computer how to work together and what to do                                   |
| 7. Byte             | g) A group of programs or documents stored in a computer, shown by a picture of a folder on the screen                   |
| 8. Operating system | h) Information and communication technology  |
| 9. File             | i) A basic unit for storing computer information used of measuring the size of a document. It is usually made of 8 bits. |
| 10. Folder          | j) Computer equipment  |

**Session 2.**

**Activity 1.-** Powerpoint presentation on Software industry and its impact on world economic.

**Activity 2.-** An exercise on Software industry with true or false options.

Decide true or false:

- |   | <b>T</b>                 | <b>F</b>                 |
|---|--------------------------|--------------------------|
| 1. Software sectors are: infrastructure software and enterprise software.                     | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Software industry includes development and publication sectors.                            | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. The leading countries in the world software industry are Canada, The UK and India.         | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. The biggest companies in the world software industry are HP, EMC and VMWare.               | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Software industry provides value to professional and personal development of young people. | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. There are over 700 000 vacancies in the European ICT companies.                            | <input type="checkbox"/> | <input type="checkbox"/> |



### Session 3.

**Activity 1.-** Present a video ‘The Art of writing Software’.

**Activity 2.-** A grammar exercise on the topic of the video.

Choose the correct answer according to the text.

1. Why are computers like musical instruments?

- a) Because we can play games on them.
- b) Because they are built to perform.
- c) Because they are very precise.

2. What makes computers perform?

- a) A stream of instructions written in code.
- b) A human voice.
- c) Access to the internet.

3. The code of a computer programmer is called:

- a) Hardware.
- b) Software.
- c) Both.

4. Don Knuth is

- a) IT professor.
- b) Programming pioneer.
- c) FORTRAN programmer.

5. Early computers were seductive and empowering to people who loved:

- a) Puzzle solving.
- b) Intricacy.
- c) Both.

6. How can we make computers understand us?

- a) We have to use very small words.
- b) We have to speak in a very formalized way a lot of times.
- c) Both.

7. What was the first language written by early programmers like?

- a) Listed letters and numbers.
- b) Numbers representing strings of zeroes and ones.
- c) Decimal language.

8. What was the more human-friendly variant of computer language like?

- a) Programmers substituted names and symbols.
- b) Programmers got the computer itself to translate a coded 'assembly language'.
- c) Both.

9. What unlocked the software revolution?

- a) Decimal language.
- b) Binary code.
- c) Both.

10. FORTRAN was the first complete "higher-level" language and it was written for scientists and engineers because:

- a) They were interested in it.
- b) They first needed and supported computing.
- c) They were instructed so.

11. COBOL is the language that

- a) Made programming for business application easier.
- b) Was used for creating business software.
- c) Both.

12. Software programs exist to process data and data needs to be

- a) Interpreted.
- b) Organized for binary computers.
- c) Both.

Complete the following statements according to the information in the video.

1. Data gets organized into: .....
2. If Grady Booch had video cameras around him from the moment he was born until the day he died, he could probably store all that information in: .....
3. What programmers want to do with that information nowadays is: .....
4. The programmers' recipes are called: .....
5. All programming problems are solved with languages, data structures, algorithms plus: .....
6. Writing new software is: .....

#### Session 4.

**Activity 1.-** A powerpoint presentation on the various job opportunities ICT industry offers.

**Activity 2.-** Let's try the art of programming and decode words using the Binary code alphabet.

#### Binary code

<b>a</b>	01100001	<b>b</b>	01100010	<b>c</b>	01100011	<b>d</b>	01100100
<b>e</b>	01100101	<b>f</b>	01100110	<b>g</b>	01100111	<b>h</b>	01101000
<b>i</b>	01101001	<b>j</b>	01101010	<b>k</b>	01101011	<b>l</b>	01101100
<b>m</b>	01101101	<b>n</b>	01101110	<b>o</b>	01101111	<b>p</b>	01110000
<b>q</b>	01110001	<b>r</b>	01110010	<b>s</b>	01110011	<b>t</b>	01110100
<b>u</b>	01110101	<b>v</b>	01110110	<b>w</b>	01110111	<b>x</b>	01111000
<b>y</b>	01111001	<b>z</b>	01111010				

First word:

01101000 01100001 01110010 01100100 01110111 01100001 01110010 01100101

Second word:

01100110 01101111 01110010 01110100 01110010 01100001 01101110

Third word:

01110111 01101001 01101110 01100100 01101111 01101100 01110111 01110011

Fourth word:

01110111 01101001 01101110 01100100 01101111 01101100 01110111 01110011

Fifth word:

01110111 01101001 01101110 01100100 01101111 01101100 01110111 01110011

### Session 5.

**Activity 1.-** Doing a quiz on the information and discussed matters during the lesson.

1. Which is the first 'higher-level' language for scientific formulas and logical instructions?
2. Which programming language is used for business applications?
3. What is the name of the step-by-step procedures that will accomplish the tasks you want your computer to do?
4. Which is the most widely used operating system developed by Microsoft?
5. What is the code of computer programming?
6. Which is the smallest unit of data in a computer?
7. Where do we store electronic documents?
8. What do we call a unit of data that is equal to 8 bits?
9. Which is the most used search engine in the world?
10. Who is the richest person in terms of profits in software industry?

## 7.- SOURCES

All these links are the resources for the lesson:

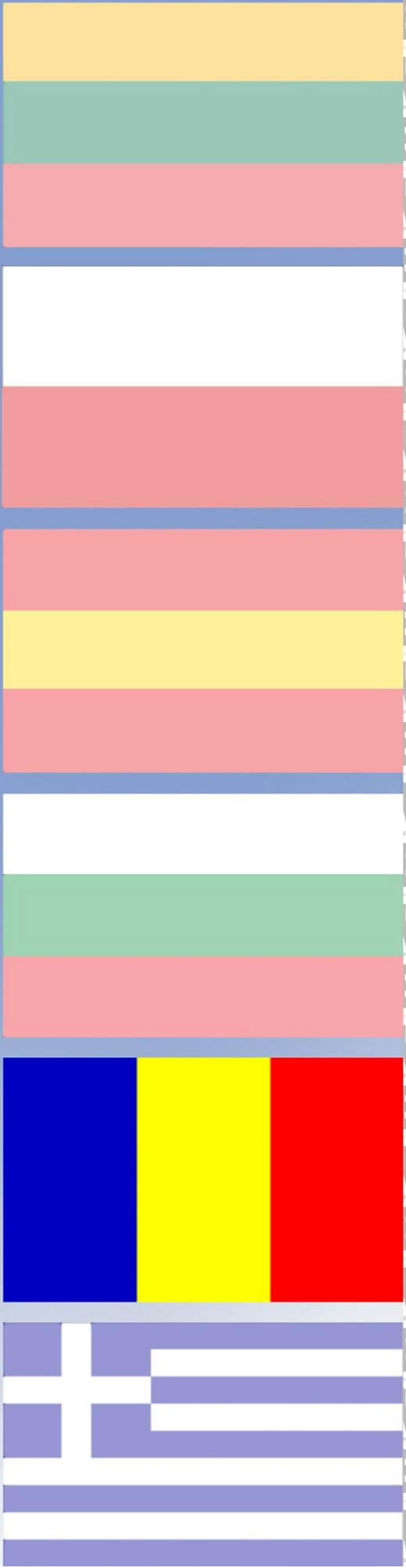
- <http://www.macmillaninspiration.com/new/resources/web-projects>
- <https://www.youtube.com/watch?v=QdVFvsCWxrA>
- [www.reportlinker.com/Software\\_Report](http://www.reportlinker.com/Software_Report)
- [www.worldindustrialreporter.com/trends](http://www.worldindustrialreporter.com/trends)







# MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE



**ROMANIA**



**COMMUNICATION**

# CLIL LESSON GENERAL LAYOUT

## 1.- TITLE OF THE UNIT

COMMUNICATION

## 2.- SUBJECT

New Technologies

## 3.- STUDENTS' LEVEL/AGE

13-15 years old

## 4.- INTRODUCTION

This lesson has as a main aim studying the most important aspects about communication. Students will learn related phrases / expressions of this topic, they will contemplate the impact of the technology evolution on human being.

## 5.- LEARNING OUTCOMES

- Being aware of the importance of communication;
- Identifying all the types of communication;
- Improving the knowledge about the evolution of telephone, Internet and electronic mail;
- Discovering the benefits and to use all these tools.

## **6.- SUBJECT CONTENT**

- Communication: definition, types of communication;
- Telephone: occurrence, essential parts, evolution;
- Internet and electronic mail: occurrence, evolution, benefits.

## **7.- LANGUAGE OBJECTIVES**

- Acquiring specific vocabulary regarding communication;
- Using the new knowledge in practice;
- Developing reading, listening and speaking skills;
- Improving oral and written expressing in English.

## **8.- DETAILED SESSIONS**

Students are divided into five groups.

### **Session 1: Communication - introduction. Telephone**

**Activity 1.- Motivating video<sup>1</sup>.**

**Activity 2.- Brainstorming.**

Starting question: What do you think about the evolution of telephone?

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<sup>1</sup> [https://www.youtube.com/watch?v=-Vw\\_57-PHb0](https://www.youtube.com/watch?v=-Vw_57-PHb0)

**Activity 3.- Reading a text related to the topic: telephone<sup>2</sup>.**

Read the text and fill in the appropriate word: ringer, dial, microphone, android, earphone, smartphone, iOS, touchscreen.

*The essential elements of a telephone are a ..... (transmitter) to speak into and an ..... (receiver) which reproduces the voice in a distant location. In addition, most telephones contain a ..... which produces a sound to announce an incoming telephone call, and a ..... or keypad used to enter a telephone number when initiating a call to another telephone. A ..... is a mobile phone with an advanced mobile operating system which combines features of a personal computer. Most smartphones can access the Internet, have a ..... user interface and have advanced operating systems like ..... for Samsung, HTC, LG, Motorola or ..... developed exclusively by Apple Inc.*

**Activity 4.- The vocabulary of the topic: keywords<sup>3</sup>.**

**Communication using telephone**

1. **Microphone** - transmitter; to speak to;
2. **Earphone** - receiver which reproduces the voice from a distant location;
3. **Ringer** - which produces a sound to announce an incoming telephone call;
4. **Dial** - keypad used to enter a telephone number when initiating a call;
5. **Smartphone** - A mobile phone that performs many of the functions of a computer, having a touchscreen interface, Internet access, and an operating system capable of running downloaded apps;
6. **Touchscreen** - is an input device normally layered on the top of an electronic visual display of an information processing system;
7. **iOS** - is a mobile operating system developed by Apple Inc. and distributed exclusively for Apple hardware;
8. **Android** - is an open-source platform founded in October 2003 by Andy Rubin and backed by Google, along with major hardware and software developers.

<sup>2</sup> [https://docs.google.com/document/d/1n6rL1k7vITUNZddjhV4GejBWJiKO9zd\\_PhZFsK1L5xc/edit?usp=sharing](https://docs.google.com/document/d/1n6rL1k7vITUNZddjhV4GejBWJiKO9zd_PhZFsK1L5xc/edit?usp=sharing)

<sup>3</sup> [https://docs.google.com/document/d/1fyTgO\\_\\_wHREAjOoaTI8ScNPaCJcBousKMX0sKUpV\\_NQ/edit?usp=sharing](https://docs.google.com/document/d/1fyTgO__wHREAjOoaTI8ScNPaCJcBousKMX0sKUpV_NQ/edit?usp=sharing)



### Activity 5.- Introducing keywords into sentences.

### Activity 6.- Using Google Apps.

Working in Google Apps, using keywords.

*Activities:*

- Read the text and identify 8 keywords related to the topic;
- Using Google Play, download WhatsApp and send a message to the other groups.
- Using Facebook, post an appropriate photo of our current activity with an original message also, tag your friends.

### Session 2: Communication - Internet

#### Activity 1.- Motivating video: email<sup>4</sup>.

#### Activity 2.- Brainstorming.

Starting question: Why is so important the internet for us?

#### Activity 3.- The vocabulary of the topic: keywords<sup>5</sup>.

#### Communication using Internet

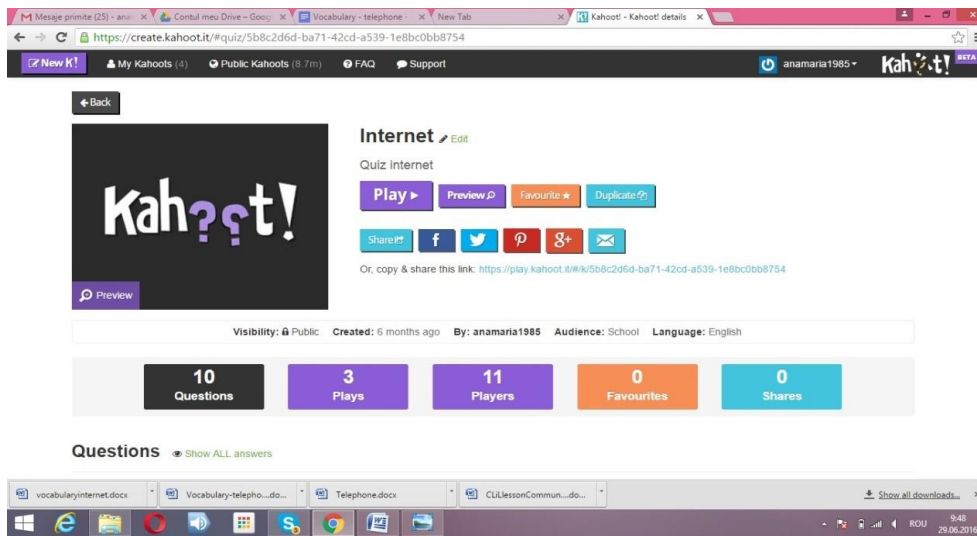
1. **Network** - is a group of two or more computer systems linked together;
2. **Site** - a set of pages with information on the internet about a particular subject, published by a person or organization;
3. **World Wide Web** - an information network of texts, pictures, and sounds where people have access to when they use the Internet;
4. **Google** - a search engine; a program for finding information on the Internet;
5. **Electronic mail (Email, e-mail)** - is the transmission of messages (emails or email messages) to electronic networks like the Internet;

<sup>4</sup> <https://www.youtube.com/watch?v=XhXk3wzemR4>

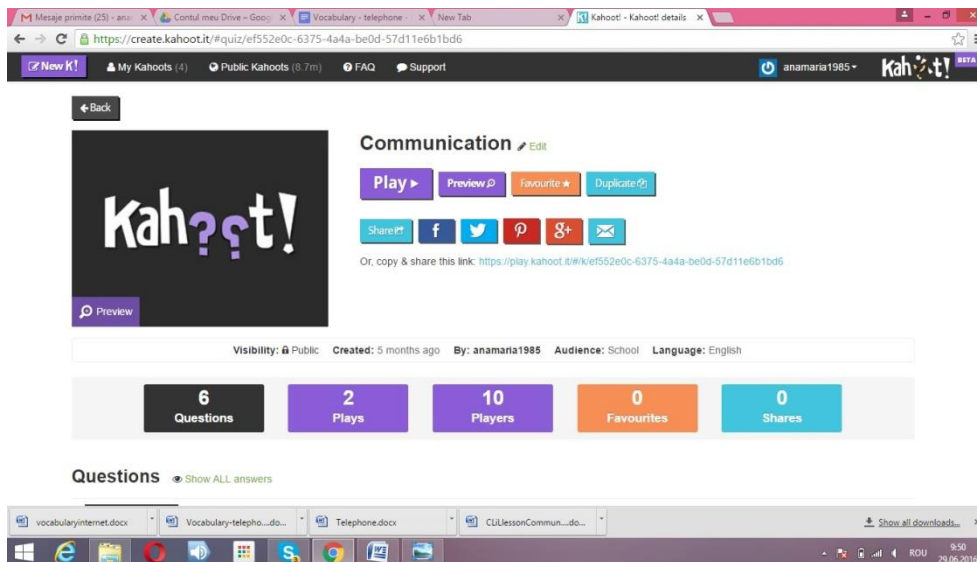
<sup>5</sup> <https://docs.google.com/document/d/1WN23SIAFw2tMBrwqEQgjKrQawiKMnuPhTctdDO9kQJ4/edit?usp=sharing>



- Writing the most used five applications; building up a bunch;
- Playing a multiple choice game;



- Filling in a text;



- Using Skype.

**Assessment:**

- Each group has to build up two sentences using the two keywords they identified;
- Each group gets two stickers - one, to write two advantages and another, to write two disadvantages of using the Internet.

At the end, the students watch a [video](https://www.youtube.com/watch?v=qRToZ3HZsmY)<sup>6</sup> about new communication technologies:

<sup>6</sup> <https://www.youtube.com/watch?v=qRToZ3HZsmY>

## 9.- SOURCES

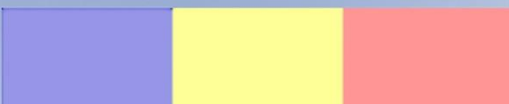
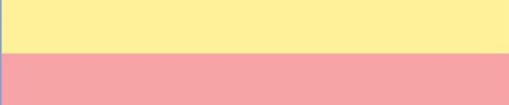
- Google Presentation [Communication](#)<sup>7</sup>;
- Google Docs: [Telephone keywords](#)<sup>8</sup>; [Internet keywords](#)<sup>9</sup>;
- Motivating video: [https://www.youtube.com/watch?v=-Vw\\_57-PHb0](https://www.youtube.com/watch?v=-Vw_57-PHb0);  
<https://www.youtube.com/watch?v=XhXk3wzemR4>
- Concluding Video: <https://www.youtube.com/watch?v=qRToZ3HZsmY>
- Kahoot;
- Skype;
- Google Play;
- Facebook.

<sup>7</sup> <https://docs.google.com/presentation/d/1b2g4AXsP9Vh250rJs2VRNlkopw3IAOW2Gs9LxsCb3xA/edit?usp=sharing>

<sup>8</sup> [https://docs.google.com/document/d/1fyTgO\\_\\_wHREAjOoaTI8ScNPaCJcBousKMX0sKUPV\\_NQ/edit?usp=sharing](https://docs.google.com/document/d/1fyTgO__wHREAjOoaTI8ScNPaCJcBousKMX0sKUPV_NQ/edit?usp=sharing)

<sup>9</sup> <https://docs.google.com/document/d/1WN23SIAFw2tMBrwqEQgjKrQawiKMnuPhTctdDO9kQJ4/edit?usp=sharing>





**GREECE**

**START UP A  
TECHNOLOGIC  
BUSINESS**

MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE



# CLIL LESSON GENERAL LAYOUT

## 1.- TITLE OF THE UNIT

START UP A TECHNOLOGIC BUSINESS: CREATE YOUR OWN BUSINESS PLAN IN THE SECTOR OF TECHNOLOGY

## 2.- SUBJECTS

ICT, technology, theoretical principles of economy

## 3.- STUDENTS' LEVEL/AGE

Secondary School (12 - 15)

Intermediated, Mixed Ability Class

B1 according to CEF (Common European Framework)

## 4.- GROUP SIZE

25 students in class (3-6 pupils in a group)

## 5.- TIMING

40 – 45 minutes

## 6.- PLACE

Computers' Lab

## 7.- INTRODUCTION

This Didactic Unit aims at studying the theoretical principles of economy in the context of a sectional approach through the practice of simulation. Students are asked to carry out the setting up of a business plan. They acquire knowledge that will help them understand the economic and social environment and familiarize themselves with institutions, factors, functions and processes of economic life.

## 8.- LEARNING OUTCOMES

- Being able to discuss the concept of a business plan by considering the issue in its sectional dimension.
- Identifying the factors that influence the development of a business.
- Being aware of the disciplines related to a business (production, promotion, management, sale, etc.).
- Recognizing the differences between the disciplines related to this field (e.g. management vs. marketing).
- Developing effective internet search skills and selection of appropriate information.
- Practicing in producing speech and processing material (photos, video) with the help of the means offered by technology.

## 9.- SUBJECT CONTENT

- The genre of business plan.
- Theoretical principles of economy (product value formation, job formation, consumption etc).
- Different types of disciplines related to a business (marketing and sales strategy, management team and personnel set-up, facilities and delivery of products, financial plan and projection).

## 10.- LANGUAGE OBJECTIVES

- Clarifying the terminology: business plan, diffusion actions to set up a business.
- Enriching their vocabulary.
- Acquiring new information about computer technology - google documents.
- Exercising the collaborative production of spoken and written language.

## 11.- TASK

A final presentation on the concept of setting up a Business Plan in the sector of technology as well as the elements that compose it, the disciplines that is made up of and the skills of workers associated with it.

## 12.- ACTIVITIES

- Watching a video about how creating a business plan.
- Presentation of a business plan tutorial in Power Point.
- Activities involved in the use of the tool of Google Slides: Answer short questions about the video; defining vocabulary; labelling pictures about businesses; writing a short comparative text about the disciplines that constitute the business and the skills of workers associated with it.
- Gathering information to make a presentation (group work, brainstorm).

### 13.- DETAILED SESSION

Create groups of pupils, one pupil of every country in each group.

#### Activity 1.- Watching.

Watch the motivating [video](https://www.youtube.com/watch?v=PDWvcsTloJo)<sup>1</sup>.



<sup>1</sup> <https://www.youtube.com/watch?v=PDWvcsTloJo>

**Activity 2.- Watching.**

Watch the tutorial presentation:

**ASUS C.O**



Business Details  
 Location: Taipei, China.  
 Our product: high quality designed Laptop



**ASUS** MARKETING AND SALES STRATEGY

- Our target group is:
  - People between 9 and 70 years old.
  - Gamers, professionals or single users.
- We will sell them on-line as well as in shops.



**ASUS** MANAGEMENT OF EMPLOYEES

- Our employees will be:
  - Salesmen
  - Accountants
  - Software Engineers
  - Hardware Engineers
  - Designers
  - Network Administrators




**ASUS** SET-UP OF THE BUSINESS

- One Shop in each Country.
- E-Shop (server in each Country).
- 3 Big Storages (China, USA, Europe).
- One Central Office in China.




**ASUS** FINANCIAL PLANS OF THE BUSINESS

- The price of the Laptop: 750€
- Cost of the Materials of the Laptop: 350€
- Profit per Laptop 400 €
- Summary of the Salaries of the Employees of one year: 9.500.000 €
- Summary of the Rents for the Facilities of one year: 1.500.000 €
- $11.000.000 / 400 = 27.500$  Laptops in order to have not loss
- We have to sale about 30.000 Laptops in order to have Profit



**ASUS** EXECUTIVE SUMMARY OF THE BUSINESS

- New Technology (ram, Processors)
- High Quality Designed Product
- Portable
- Only 1.5 Kg





**Activity 3.- Team presentation** - Each team has to make a presentation in Google slides in which:

- Create six slides, one slide for every section of the Business Plan.
- On the first slide, every team will include business details, such as name, business logo, central location and the product they sell, about one of the below businesses which the teacher gives them (Microsoft, Apple, Samsung, Intel, AMD, Ubisoft). They will pretend that these businesses are new start-ups and they have not previously existed.
- On the second slide, every team will write about marketing and sales strategy which is about target group of people who are going to buy their product and how they are going to sell it, for example on the internet or in shops etc.
- On the third slide, every team will write about how to manage their employees, for example what the expertise of your employees should be.
- On the fourth slide, every team will write about the set-up of their business, such as the facilities (storage, servers, shops, offices) and how they plan to deliver the products to the customers.
- On the fifth slide, every team will write about the financial plans of their business. Every team will write the price of their product, the summary of the salaries of the employees for one year, the summary of the rents for the facilities of one year, the cost of the materials to produce the product, the profit per Laptop and finally how many products they must sell during this year in order for their business to have profit. They will also note the amount of money that will bring Summary of the Rents for the Facilities of one year profit. All the above numbers will be imaginary, but they have to be close to reality.
- On the sixth slide, every team will write about the executive summary of their business. They will explain why they believe their company will succeed.

**Activity 4.- Class presentation** - Each team has to present the Google slide to the class:

- First, they present their business and the reason why they believe it will be a successful business.
- After that, they present all the slides to the class.
- Finally, they have 1 minute to persuade their classmates to buy their product.



**Activity 5.- Remake** - Each team has to add a new slide with their names and send the Google slide to the teacher.

#### 14.- SOURCES

- Motivation Videos: <https://www.youtube.com/watch?v=PDWvcsTloJo>
- Microsoft Power Point Tutorial
- Google
- Google Slide



MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE



**TEAMS**

**MEMBERS**



MULTILINGUALISM AND WORK PERSPECTIVES IN EUROPE



## **Bulgaria**

Ivanka Pukneva  
Liudmyla Ryzhuk  
Toshko Landzhov  
Boryana Choreva  
Mariya Ivancheva

## **Lithuania**

Laima Baltutiene  
Laima Šalkauskienė  
Reda Bartkuvienė

## **Romania**

Gabriela Tătuc  
Cecilia Oana Crăciun  
Mihaela-Carmen Rotaru  
Ana-Maria Hodorogea

## **Greece**

Aikaterini Agorastou  
Evangelos Kapetis  
Filaretos Papavramidis

## **Poland**

Artur Baranowski

## **Spain**

María Bernabéu Ribera  
Alicia Giménez Gómez  
Emili Hernández Lladosa  
María Teresa Huesca Calatayud  
Fernando Maestre Orts  
Ignacio Manuel Martínez Pérez  
María Amparo Miró Llinares  
Alberto Senabre Pérez  
Remedios María Vázquez Azorín









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