Our Aquarium: Learning English through the visit to the aquarum
Year one secondary

Development of thinking skills that link the formation of concepts (abstract and concrete), understanding and language
Students get to know different type of fish and to make descriptions and practice speaking , ...
They get knowledge about tips, experiences and ideas so that the seas do not become Plastic Landfills
Students get to know how the **benefits of the marine currents**

Expressions

Think about ....
What do you mean....
Has it got relevant .....
Where do they grow.......
We need to .....
We have to ....

Grammar

Present simple
Present simple of the verbs ending in s, ss,sh, x, o
Present simple of the verbs ending in "y"
Time expressions

Vocabulary:

Black Moor Goldfish
Blue Green Reef Chromis (BGreen)
Boesemani Rainbow (Boese)
Electric Yellow Cichlid
....

Sounds

English vowels monothongs:
/e/   /a:/

Activities about Oceans

1º Watch these videos

https://www.youtube.com/watch?v=6zrn4-FfbXw
https://www.nationalgeographic.org/video/ocean-plastics/

Read the guide

https://oceanservice.noaa.gov/hazards/marinedebris/plastics-in-the-ocean.html

https://oceanservice.noaa.gov/education/tutorial_currents/welcome.html

Choose one topic and make a poster about it . It only shoud include text (make it editable)

2º Ocean currents

Read the test and wite in your own words two of the main ideas

What are sea currents? They are large bodies of water in movements that move in the depths of the oceans.
Marine currents are decisive in modifying the climate. They transport cold or hot water from one place to another in the oceans and seas

Ocean currents are as important to weather and climate as surface winds. They are in charge of distributing the energy of the ocean and are organized according to their temperature and salinity, which conditions their density.

The currents are movements of water that occur within the sea. They can be deep currents due to changes in temperature, salinity and density, or surface currents due to the action of the wind.
These currents have a multitude of causes, mainly, the movement of terrestrial rotation and by constant or planetary winds, as well as the configuration of the coasts and the location of the continents.

The category of surface ocean currents includes permanent ocean currents such as the **Humboldt current**, the **Gulf current** and **Equatorial currents**, which are a part of the general circulation of the oceans.

These marine currents transport cold waters from the Poles to the warm regions of Ecuador and vice versa, which contributes to the balance of ocean temperatures on the globe.
There are two types of currents: warm, which form on the eastern coasts of the continents and cold that originate on the western coasts.

Benefits of the marine currents: transporting nutrients that help marine biodiversity in its long journey. They also carry sediments that in their accumulation help protect the coasts from contamination. It helps some marine species as a transport channel, as is the case of sea turtles

Answer these questions

Which are the name of the main ocean currents?

Name two benefits of marine currents

Explain what are the **Ocean currents**

How marine currents influence the climate?

what are the causes of oceans currents?

3º Choose a fish, describe it (written), work it (orally) and record it (The fish you like to have in your acuarium

1.- Barracuda
2.- Orca- The killer whale
3.- Shark

……………..

4 º Project Work

   a. **Build and aquarium at your school**

Which fish will you include?

Describe your Fish

Build your aquarium with Cospaces

The teacher explains how to do it, or as the traning was on line; we used a tutorial.

The objective of this project is to create Virtual Reality. This enables students to do a significant amount of research and data collection, organize the information and knowledge, and decide how to best present it in narrative or written format.The use of this type of visuals and the creation of 360° itineraries is very usefull for students engagement in the learning proccess. It offers a way of bringing students We can use this format to emphasize many details, offer additional information, use pictures and virtual reality to learn, It is a useful tool to work in an interdisciplinary way different areas of the curriculum. Students can create descriptions of different fish and even record it , Students can explore their creativity working in teams and create their aquarium.

Steps to do the work

Do reseach work, activities lead by the teacher,...: this helps to acquire new competences and skills. Students are able to extract own ideas and communicate experiences ,descibe animals, ideas and knowledge.

Students write the script using the chousen tool VR, cospace, ...: Students in groups write texts for their 360º and VR works, in order to show evidences os nowledge, show details, introduce reach reasources like audios, 3D objects, posters, videos,...

Produce the VR /AR/ Cospace product : once they learnt to use the tool, they in teams procede to create uding the most adecuate reasources

Digital Rights & Responsibilities: Teachers must help students to know how the technology must be used in an appropriate manner and we made sure basic digital rights must be discussed, and understood in the digital world when they produce their own works.

Digital Security (self-protection): we prepare students to take elctronic precautions to guarantee safety, students learnt about backups of data, and control of the equipment, etc

Create a VR/ AR/ cospace: Students create their products using this activity is easy and motivating way for students.

Evaluation: It will be descibed in detail later in this work

https://edu.cospaces.io/UVN-XMN

The work made by students can be used to teach other students. Other teams and students of younger class can access to this info and knowledge. To do that we probide the glasses virtual reality. The teacher probides the desciptions of each fish (made by students who created the activity) and the students learners, have to identify the name of each fish.

To work with studens we used videoconference and tutorials.

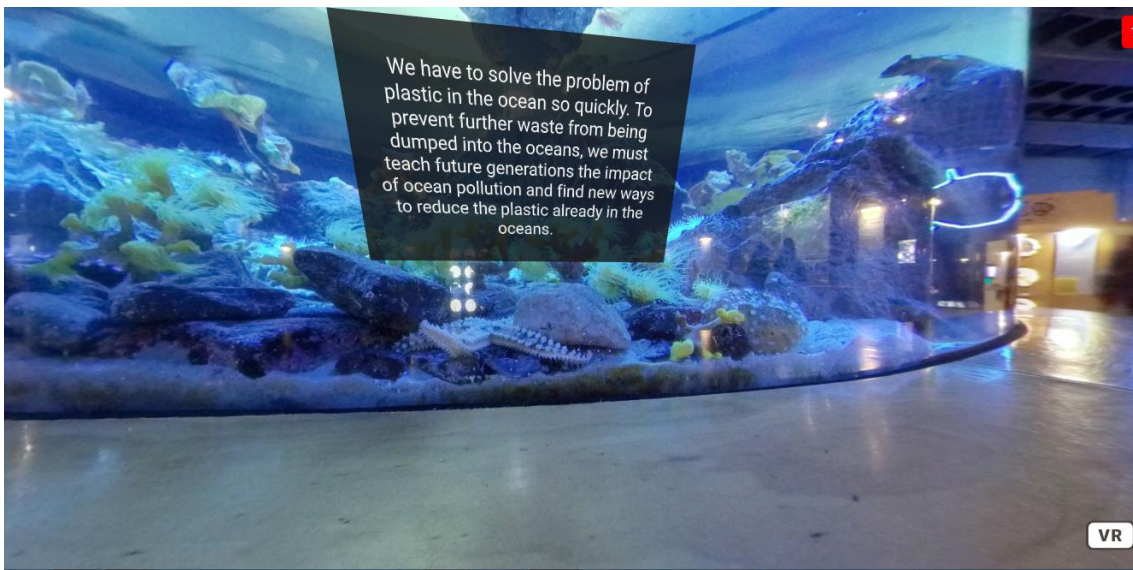b. Using an aquarium 360º pictures of the aquarium of A Coruña and the CESGA App create a virtual reality project.

In the project include information in exercise 1, 2, .. and also use tests (posters) images, sounds, 3D objects, ...

The team must: research the the resources, selected them and define the areas they want to focus on and how to present the info. They will have to look for 360° photos to create their virtual tour to the aquarioium probiding clear and usefull information.

https://vr.ocean-connections.net/view/1591866508894

https://vr.ocean-connections.net/view/1592072453657

We have to solve the problem of plastic in the ocean so quickly. To prevent further waste from being dumped into the oceans, we must teach future generations the impact of ocean pollution and find new ways to reduce the plastic already in the oceans.
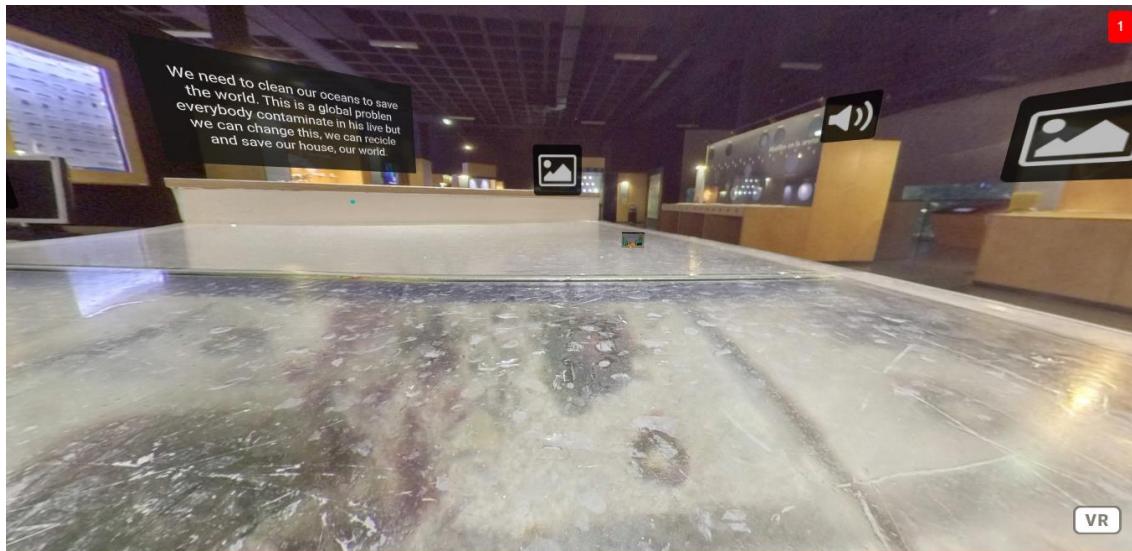
https://vr.ocean-connections.net/view/1591389695279

The team who built this activity learnt throw reasearch work, select information and resources, comunicate finds in the most clear and relevant way.
Students learners with glasses of virtual reality   have to answer a Questionaire, on "Oceans, Oceans currents, Plastic at our oceans .... the contens can vary depending on the project contents

c.   Visiting the aquarium to get to know all about oceans

A visit to the acuariun is a good way to learn about oceans,   but if we but if we complete it with a cospace activity it will be a good resource. This can be used as resouce for teaching other students.

1.The students do a reseach work, plan the info they like to focus the activity , desing scene, get to know the information they like to communicate, create the texts with information about the Acuarium and record it in MP3
The students get to know how cospace work (The teacher explains it or uses v
a tutorial.- There are tutorials probided by the tool but we produced a more simple one)

Studens design in teams a nice envirooment explain all information and knowledge they like to communicate   and with the recorded sound they do the an animated virtual reality scene.

This activity is a good way for students learning. it allows students to use 360° to which complementary information can be added through different types of icons or forms available on the web or with resources of the own platform.
Again the resource can be used for other students learning.
This is the final product , we didn´t have much time to finalize the project
https://edu.cospaces.io/CCU-DTP

5º Evaluation process

Selfevaluation
Each student plans his own learning

You will reflect on which with your objectives for your learning and for team work and you have to design your learning cycle.

Each students must take responsibility for his/her own learning and know in each task that you do what you are expected to learn.

For this you must first design "My learning cycle" (according to the rubric?)
Self assessment students write in their diary about their own activity/work
Each student writes about

What I have learnt?
To search information in Internet, build up ....

What were my difficulties?

What do I have to improve?

What are my strengths?

<u>Group assessment? (The points can vary)</u>

Teachers and students agree the assessment criteria, they write it in the whiteboard assessment criteria and from that one group evaluates another group work, they have to give feedback from the work done

Assessment criteria

Relevance of the topic chosen, images , and resources used , information, ...

Is it Clear ?

Does it use aSropritate ICT Tools ?

What will you add ?

Does the presentation probide evidences of the knowledge to be communicated

The main objective is students use the error to improve their learning. When the VR is produced by one class the whole group together with the teacher analyzes the results and they reflect on what they have learn, which are the week points of the work, what were their difficulties and what were their strenths.