ICT TOOLS AND STEM ACTIVITIES

CEIP JUAN PÉREZ VILLAAMIL

THE IMPORTANCE OF DIGITALIZATION AND STEM IN EDUCATION

In recent years, there has been a great tendency towards the use of technology and **its integration into the curriculum has gained a great importance**. Particularly, the use of audio-visual materials in foreign language teaching classrooms has grown rapidly because of the increasing emphasis on communicative techniques, and it is obvious that **the use technological devices is a great help for foreign language teachers in stimulating and facilitating the target language**.

THE IMPORTANCE OF DIGITALIZATION AND STEM IN EDUCATION

However, we should also bear in mind that **STEM education** is highly important today for our students to become the active citizens of tomorrow. STEM education is the integration of science (among others) to create a student-centered learning environment in which students investigate and construct evidence-base explanations of real-world phenomena. Given the fact, that our school is bilingual and both Natural Science and Social Studies are taught in the English language, a combination of digitalization and STEM activities are implemented in our school in order to foster inquiry-based and motivating learning experiences.

ICT TOOLS

ICT tools are fostered by all teachers in our school so that our students improve their digital competence, and what is most important: every student has different needs and interests and the use of ICT tools helps teachers to cater for diversity in many ways.

ICT TOOLS

COMPUTER ASSISTED LANGUAGE LEARNING (CALL)

Nowadays, teachers have different digital and technological resources to draw upon when planning their lessons, and this has been possible thanks to the **Computer Assisted Language Learning**. It is an interactive method of instruction that helps learners achieve their goals of learning at their own pace and ability. In this approach, computer technology is used in teaching/learning procedures at all stages such as presentation, practice and feedback.

ICT TOOLS

We could mention many different CALL tools and applications teachers benefit from and use in their classroom. However, we will focus on the most important ones:

- **The smart board in combination with the overhead projector**: it includes activities in which students can develop the four linguistic skills. It is an interactive form to do feedback with students. In fact, most textbooks nowadays have the digital app on the Internet and teachers can make their explanations, correct activities and enhance students´ participation using the smart board. They can participate actively solving the activities. If the teacher does not have a smart board in his/her classroom, a white board can also fulfill some of the functions the smart board includes.

9 I love that film!

WHAT'S HAPPENING?

Your guide to the best places to go in town.

Film Club

The Art of the Camera

Winning Voice

Starlite Dance Group

Theatre Royale

Starting off

1 Work in pairs. Look at the guide.
1 Which of the things would you like to go to?
2 What kind of things can you do where you live?

2 Complete the guide with words from the box.

> actor   bands   dancers   photographers   play

Reading Part 4

1 What is your favourite film? How many times have you seen it?

2 Work in pairs. Look at these famous bears.
- Which do you know?
- What do you know about them?
- Do you know any of their stories?

Exam advice
- Always read the whole text before you try to answer the questions.
- Look carefully at the words around the space, and make sure that your answer goes with them.
- Try to think of a word which fits in the gap before you look at the options.

3 For each question, choose the correct answer for each gap.

Paddington Bear

Michael Bond

Paddington's Adventures

1 A watched   B saw   C looked
2 A went   B stayed   C left
3 A decided   B thought C took
4 A did   B made   C pushed
5 A only   B alone   C first
6 A attractive B favourite C excellent

4 Do you like stories about animals? What are your favourite ones?

ICT TOOLS

- **Internet websites**: The world wide web offers infinitive resources to work on the linguistic competence both in the classroom and outside the classroom. In that way, teachers will be able to use different websites in order to work on grammar, vocabulary, phonetics and syntax among others. Some examples of the pages we use are the following:

1. **Grammar**: some websites are focused on different grammatical aspects such as verbs, determiners, prepositions, etc… The website https://learnenglishkids.britishcouncil.org/grammar-practice allows you to work on for instance on frequency adverbs, comparatives and superlatives, possessives, have got, modal verbs, etc..

2. **Vocabulary**: some websites are focused on vocabulary. For instance, the website https://www.gamestolearnenglish.com/ allows you to practise vocabulary items related to the weather, food, animals, etc… You can also play the Spin the Wheel game in the website http://www.eslgamesworld.com/members/games/vocabulary/spinwheel/ and practise vocabulary about home, jobs , food, etc..
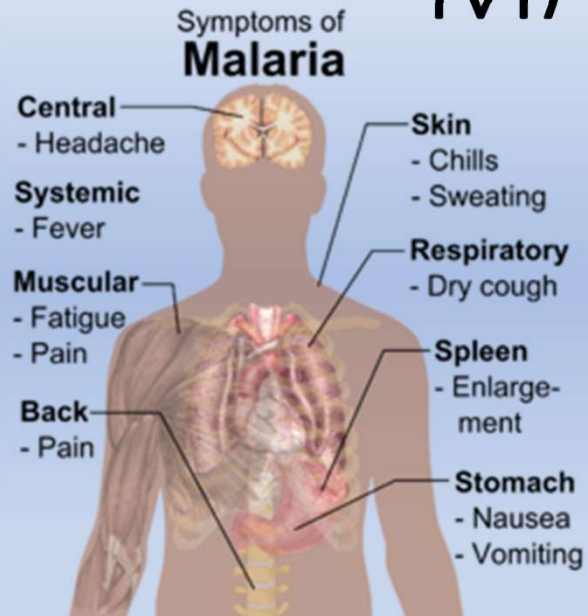
ICT TOOLS

1. **Phonetics**: same phonics websites can help the student to improve their pronunciation and sound recognition. For instance, in the webpage https://www.education.com/game/blending-sounds-spelling/ , students can practice all the sound including blending sounds.

2. **Syntax:** there are also sentence builder websites in which the students have to construct complete sentences by dragging words to an open space. https://www.education.com/game/adjective-adverb-sentence-builder/

- **All these websites are based on gamification, motivating our students in order to obtain rewards.**

ICT TOOLS

- **E-creation tools:** teachers who are interested in using technology as a means of promoting English language learning have a wide variety of technological e-creation tools at their disposal to choose from. E-creation tools are software or applications of software that provide a free forum for teachers or students to publish their original work. There are different kinds of e-creation tools available nowadays:

➤ **Presentation software**: it refers to software designed for creating presentations such us PowerPoint or FreeOffice. Teachers can create **content-rich presentations** to explain or review concepts with the aid of visuals. Teachers use presentation software for all the core subjects, especially English, Natural Science and Social Studies.

MALARIA

Symptoms of **Malaria**

Central - Headache

Systemic - Fever

Muscular - Fatigue - Pain

Back - Pain

Skin - Chills - Sweating

Respiratory - Dry cough

Spleen - Enlarge-ment

Stomach - Nausea - Vomiting

Where is Europe?

- Europe is located in the Northern Hemisphere and is the 2nd smallest continent in the world.
- Europe borders the Atlantic Ocean to the west and the Arctic Ocean to the north.
- Europe also borders the Ural Mountains and the Caspian Sea to the east.

ICT TOOLS

Gamification tools: gamification in education refers to the introduction of game design elements and gameful experiences in the design of learning processes. Nowadays, we can count on many different gamification apps in order to improve different language skills and foster different key competences such as learning to learn, or sense of initiative and entrepreneurship. Some example of gamification apps are Quizlet, ClassDojo, Classcraft or Minecraft Education Edition.

Fichas de aprendizaje Irregular v...

quizlet.com/300741108/irregular-verbs-flash-cards/

Quizlet Inicio   Soluciones de libros de texto   Tu biblioteca ∨   **Crear** ∨

Prueba gratuita   🔍 Unidades de estudio, li...

Irregular verbs

4.7 ★ ★ ★ ★ ☆   19 reseñas   Dejar una valoración

📈 48 usuarios estudiaron esta unidad en los últimos 3 días

JUEGO DE CLASE

☰ Live

ESTUDIAR

🔲 Fichas

◔ Aprender

✎ Escribir

🔊 Ortografía

🗐 Probar

🗗 Combinar

To beat,

beat,

beaten.

← 2/82 → ⌨ ⛶

create.kahoot.it

Kahoot! Inicio Descubre Biblioteca Informes Grupos Marketplace   ⭐ Actualizar Compartir **Crear**

Añadir nombre +

laulopezmartin

Plan: Actualizar

Mis intereses(2)   Mostrar

Ⓐ **Perfil verificado**

¡Solicita tu perfil verificado hoy mismo!

Ir a la app

Kahoots asignados

Los estudiantes juegan de forma independiente durante un tiempo determinado con preguntas y respuestas que

Kahoot! EDU Summit! 2022

Join us on June 14 and 15 for our FREE virtual PD event to map out your next school year!

Register now!

14-15 JUNE 2022 Kahoot! EDU Summit

Cursos

Crea tu primer curso y asígnalo a los estudiantes. Haz un seguimiento del progreso con informes detallados, envía recordatorios y edita el contenido para adaptarlo a las necesidades de los estudiantes.

Crear curso

Novedades

Nuevo **Join the Kahoot! EDU Summit to map out your next school year!**
On June 14 and 15 at 9:00am PDT we'll be hosting our free virtual PD event to help you pack your teaching toolkit with all the digital essentials

Mis kaho...   **Espacio de equi...**

ILLNESSES
23 Preguntas   laulopezma 4 jugadas

TOPIC 6
19 Preguntas   laulopezma 1 jugadas

Natural Science Unit 1
22 Preguntas   laulopezma 2 jugadas

Ver todos (9)

¡La app de Kahoot! ya está en español!

Más información

Últimos informes

Kahoot!   **Inicio**   **Descubre**   **Biblioteca**   **Informes**   **Grupos**   **Marketplace**   ⭐ **Actualizar**   **Crear**

Preguntas (23)   **Mostrar respuestas**

ILLNESSES

4 jugadas · 32 jugadores   ✏️ ☆ ⋮

Empezar   **Asignar**   Practicar

ILLNESSES

🌐 Un kahoot público

👤 **laulopezmartin**
Actualizado 3 months ago

---

1 - Quiz

INFECTIOUS ILLNESSES

20 s

---

2 - Quiz

ACUTE ILLNESSES

20 s

---

3 - Quiz

CHRONIC ILLNESSES

20 s

---

4 - Quiz

NON-INFECTIOUS ILLNESS

20 s
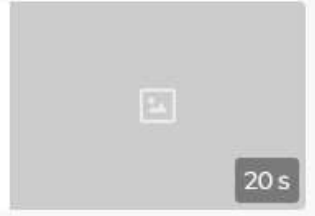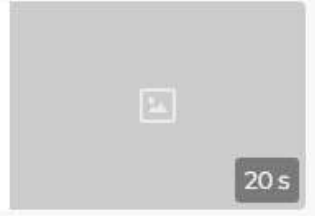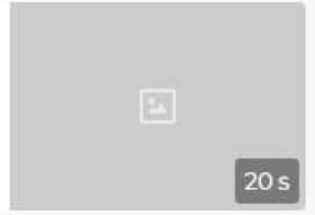
ICT TOOLS

- **Podcasts:** they are a great resource for listening comprehension material. Most of them are relatively short, and teachers come up with a few comprehension questions or cloze exercises for specific words and fill in the blank. For instance, a good webpage to keep in mind would be *https://www.bbc.co.uk/podcasts*

ICT TOOLS

- **Blogs:** They are web logs or journals, posted to a website where they can be seen by anyone. Some teachers have use blogs to publish resources, or class events. They can use blogs to help students´ master content and improve their skills. There are free different websites teachers can use such as **http://blogger.com**

Here we are again¡

| Página principal | ENGLISH | NATURAL SCIENCE | SOCIAL STUDIES | DICCIONARIO INGLÉS/ESPAÑOL OXFORD | READINGS |

| TRINITY EXAM | RESUMEN CONTENIDOS INGLÉS |

sábado, 12 de septiembre de 2015

ESTIMADOS INTERNAUTAS.

Buenos días a todos,

¡Ya volvemos de vacaciones y estamos en el tercer trimestre!

Un saludo,

Laura.

_____

He añadido una página más denominada "readings" (también con una pestaña en la parte superior de la página) en la que cuelgo libros en inglés de lectura fácil que los niños puedan leer online mejorando la pronunciación así como la lectura. Os invito a que la utilicéis.

Así mismo, en la pestaña "Trinity" he introducido juegos de vocabulario básico que es susceptible de ser preguntado en el examen del Trinity.

Nuestro colegio

ASIGNATURAS Y CONTENIDOS

ENGLISH

NATURAL SCIENCE

SOCIAL STUDIES

CONTENIDOS TERCER TRIMESTRE

ICT TOOLS

- **Reading apps:** there are different apps teachers can use in order to foster reading promotion and digital competence. The Autonomous Community of Madrid offers teachers the app "Smile and Learn", which is a learning platform specialized in videos, games, and stories. It reinforces cross-curricular learning and cognitive skills development. Teachers can assign different tasks to students and keep track of their performance.

Likewise, we also have a digital app to assign readings to our students on a weekly basis: Milton Travelers.

milton
education

Tools Resources Content Assignments Analytics Gradebooks Settings Students Help

primar

6ºA

STUDENT MODE

CLASS GAMES

NEW

CLASS COINS

STUDENT REWARDS

MANAGE GROUPS

TIMER

PICK A STUDENT

TODAY

Every year, I go to the beach with my family for summer vacation. I usually swim in the ocean, build sandcastles and look for seashells. That was fun for a few years, but this past summer, I was a little bit bored. I wanted to try something new.

One morning, I saw some surfers in the water. They were riding some big waves. I asked my parents if I could learn to surf. They found a surf school at the beach and signed me up for a lesson.

ICT TOOLS

- **Virtual classrooms: Aula Virtual Educamadrid and Google Classroom.** The Autonomous Community of Madrid encourages public schools to make use of virtual classrooms for several reasons, being the most important ones:
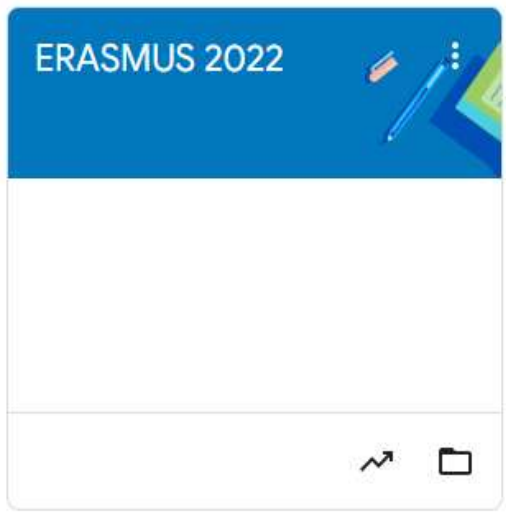
- Both students and parents have information about the contents, activities, announcements, assignments, etc, of what it is going on during the school year. Therefore, they have a clear understanding of the teacher´s expectations and how the learning process is organized.

ICT TOOLS

- If a student has been absent, he/she can check the assignments and the contents covered during his/her absence and keep track.

- The COVID-19 pandemic situation has changed education for ever, with the distinctive rise of e-learning. It has forced schools and education to engage in a digital transformation, and a virtual classroom is the best asset. We do not know if another pandemic or if another snowstorm such as Filomena will happen again.
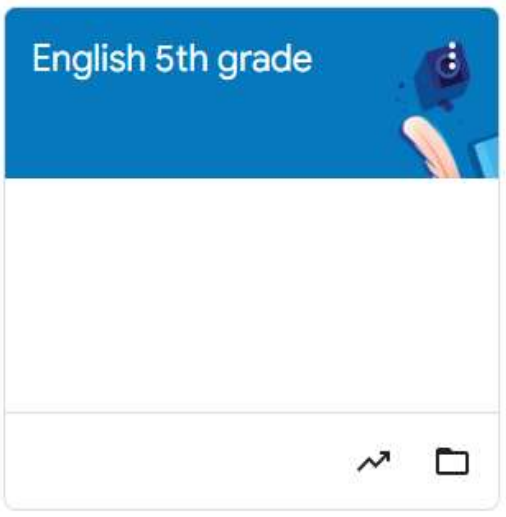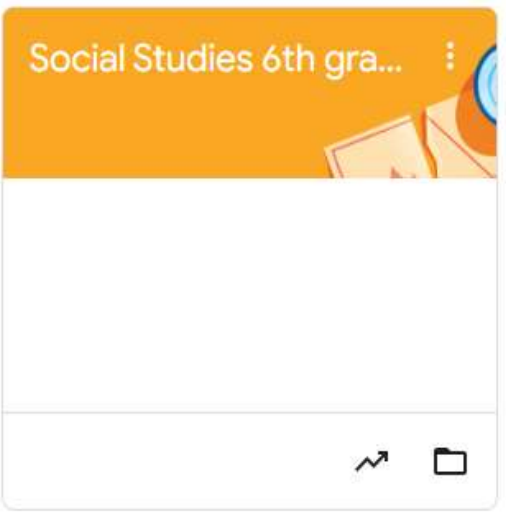
classroom.google.com/u/0/h

≡ **Google** Classroom   + ⠿ L

📁 Para revisar   📅 Calendario

ERASMUS 2022

English 5th grade
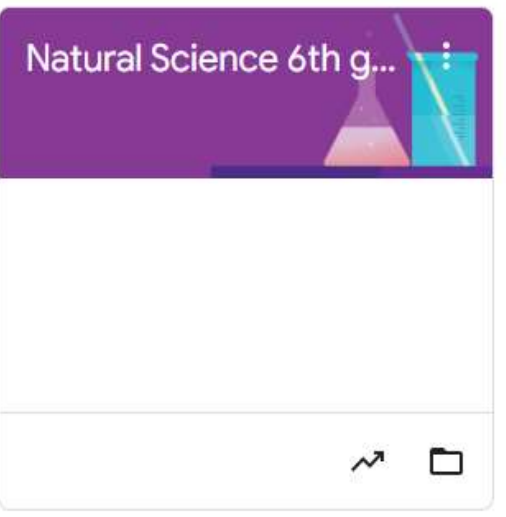
Social Studies 6th gra...

Natural Science 6th g...

English 6A, 6B and 6C

ⓘ

classroom.google.com/u/1/c/MzkwOTU5MTgzMzcz

SOCIAL SCIENCE 6TH GRADE

Tablón   Trabajo de clase   Personas   Calificaciones

Meet

Generar enlace

Código de clase

75jzefk

Próximas entregas

No tienes ninguna tarea para esta semana

Ver todo

Anuncia algo a tu clase

Laura López Martín
29 abr

Estimadas familias:

Tal como informamos ayer a los alumnos, el control de CCSS de la unidad 5 será el próximo martes 10 de mayo. Les hemos entregado en el día de hoy el activity book de la unidad 5 para que puedan trabajarlo este fin de semana. Lo comenzaremos a corregir el próximo martes 3 de mayo.

Os remitimos en adjunto el archivo en color porque lo necesitarán para hacer el ejercicio 10.

Así mismo, os recordamos que dentro de los contenidos de la unidad 5 entrarán también la localización de comunidades autónomas/ciudades autónomas y provincias. Realizaremos en clase dos mapas (uno de comunidades autónomas/ciudades autónomas, y otro de provincias) previamente al día del examen.

Buen fin de semana.

Profes CCSS.

Activity book Unit 5 Social...
PDF

Añade un comentario de clase

ICT TOOLS

- **Web 2.0 tools for hosting videos, audios and activities:** The Autonomous Community of Madrid also offers teachers the so called "Mediateca", which is a Web 2.0 tool. It allows teachers to upload different digital materials that can be shared with other users and students. It is also a good option to share the graduation ceremony and other school celebrations with parents.

Mediateca de EducaMadrid

mediateca.educa.madrid.org

Mediateca
EducaMadrid

Buscar...

Iniciar sesión

Inicio

Últimos contenidos

Centros

Contenidos...

Inicia sesión para aportar contenidos, crear listas de reproducción...

Iniciar sesión

22' 07"

18' 20"

27' 28"

16' 37"

The Friday radio show 22

subido por Cp machado colladovillalba

hace 16 horas - 🇪🇸 - Escuchado **6** veces

Sociales tema 6. La Edad Co...

subido por Cp machado colladovillalba

hace 16 horas - 🇪🇸 - Escuchado **5** veces

PODCAST EL BERCIAL

subido por Cp elbercial getafe

hace 2 dias - Escuchado **5** veces

LAS SONRISAS DE RASCAF...

subido por Irene G.

hace 7 dias - 🇪🇸 - Escuchado **4** veces

Lista

ver más

8 elementos

38 imágenes

2 elementos

37 elementos

XVII Foro por la Convivencia

subido por Educamadrid

hace 3 meses - **332** visualizaciones

CARNAVAL CIRCO 16

subido por Tic cp juandeaustria leganes

hace 2 años - **498** visualizaciones

Valores 3º EP

subido por Gerardo C.

hace 3 años - **7** visualizaciones

NAVIDAD

subido por Cp claudiovazquez morata

hace 7 años - **10** visualizaciones

Usa el buscador para encontrar más contenidos.

Microsoft Store

STEM ACTIVITIES

We will also give some examples of the STEM activities we have carried out in this school year:

- To foster entrepreneurship, students had to create an invention, explain its purpose, give it a price and explain how it was going to be advertised.
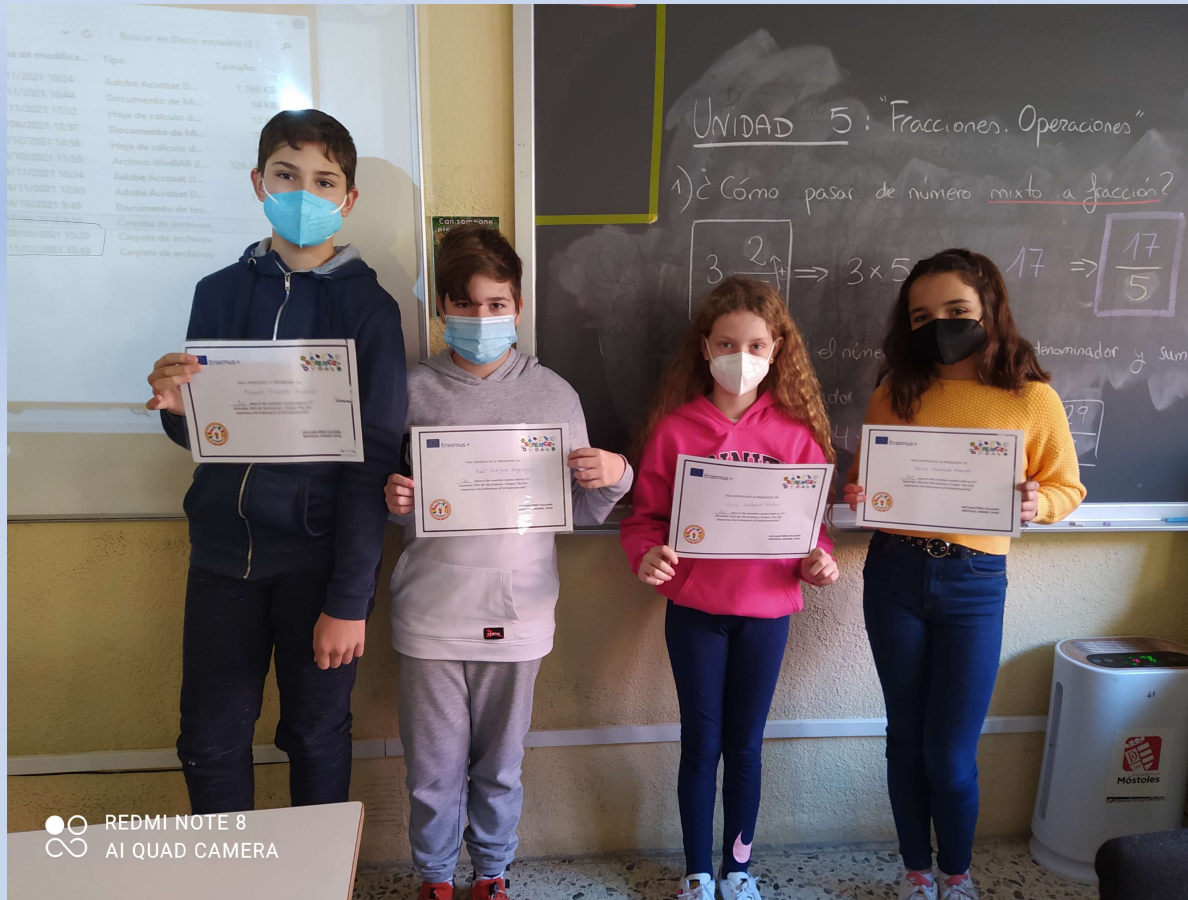
STEM ACTIVITIES: INVENTIONS

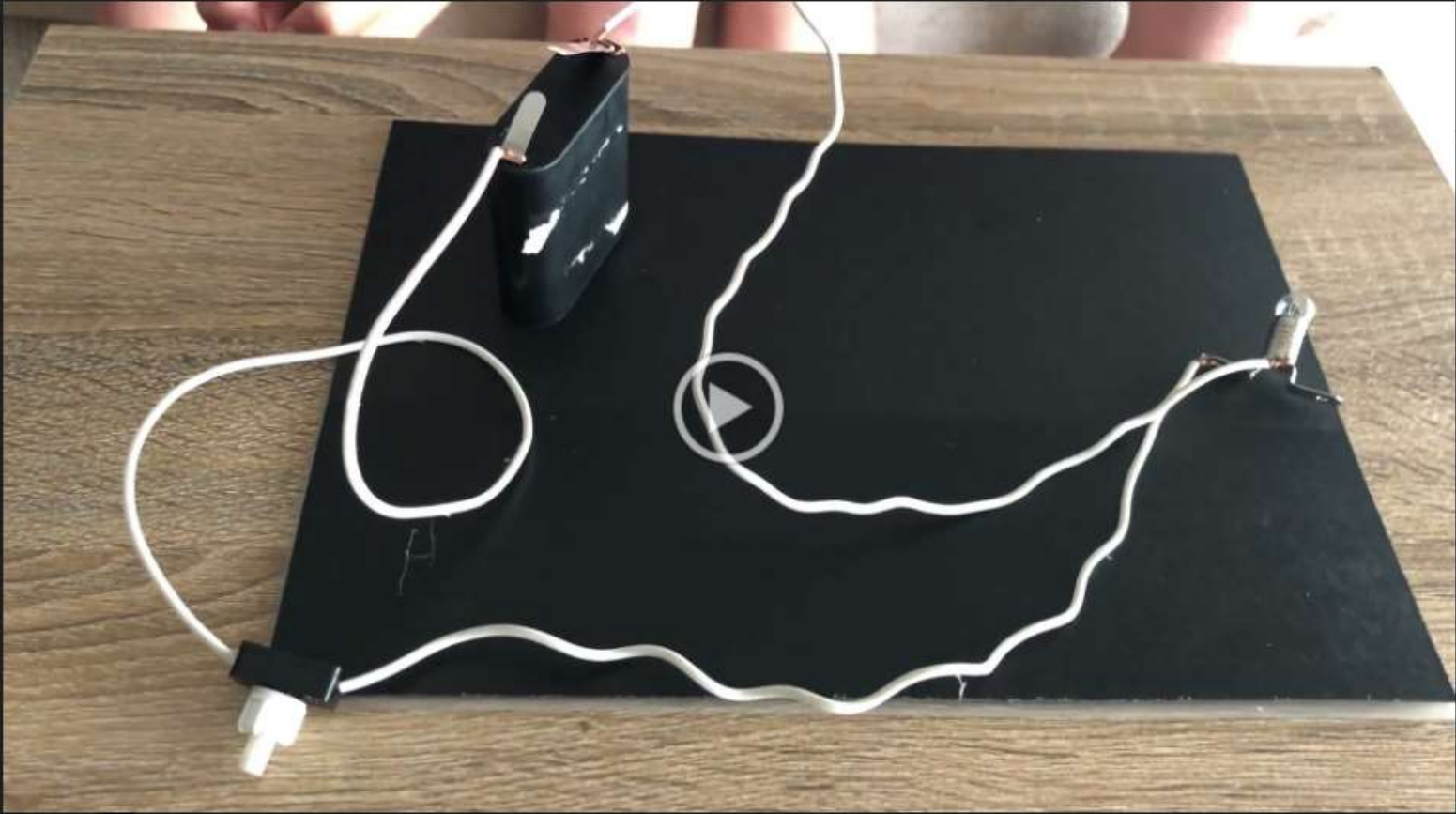# STEM ACTIVITIES: INVENTIONS

STEM ACTIVITIES: INVENTIONS

STEM ACTIVITIES

We will also give some examples of the STEM activities we have carried out in this school year:

- To Foster initiative in the scientic field, our students proposed experiments involving change of the state of matter, chemical changes or ways to create energy. They shot them at home and then we all saw them and drew conclusions.

STEM ACTIVITIES

We will also give some examples of the STEM activities we have carried out in this school year:

- To Foster the key competence learning to learning, we currently do activities involving **the flipped classroom approach in combination with a cooperative approach,** reversing traditional roles of *learn at school and practice at home* to **learn at home and practice at school**.

One example of a flipped-classroom activity carried out in Social Studies for 6th graders

- Students watch different videos at home about Pablo Piccasso and the Guernica, taking notes of the most important aspects explained:
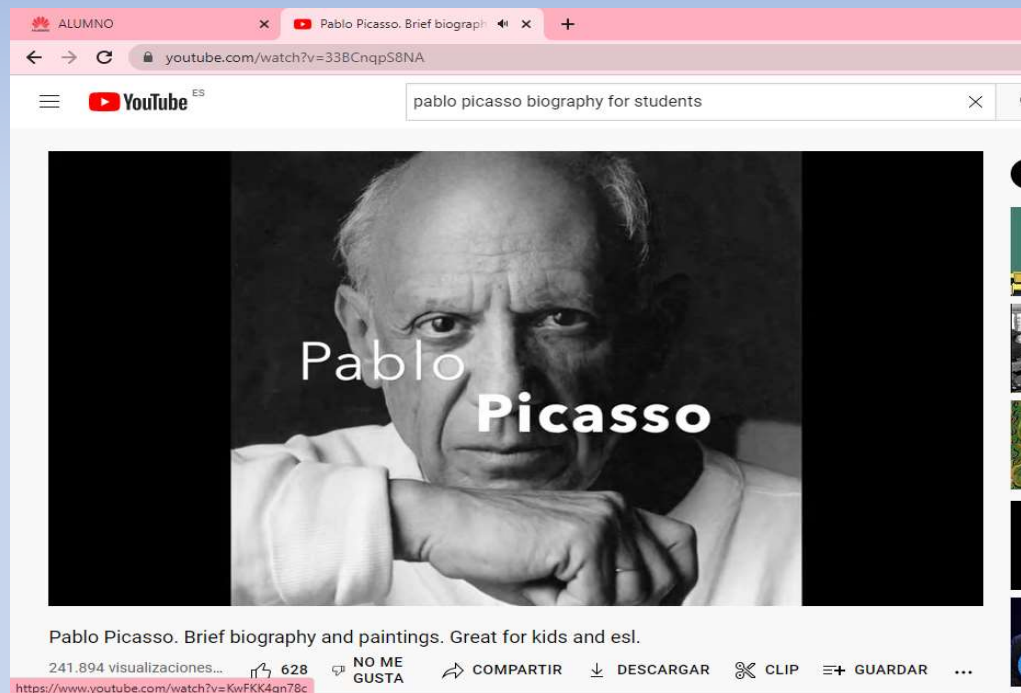
The following day the teacher starts the session using a KWL chart to know what they have learned at home after watching the video links.

L What I Learned

In this way, the teacher knows what students have understood and the doubts they have about the topic itself.

Using 8-minute stations and based on task-based learning, students have to carry out different activities related to Picasso and The Guernica:

Station 1: watch a video.

Station 2: read a short text.

Station 3: write a short text about their findings

Finally, the students explain their findings and the teacher will fullfil a debriefing about the contents treated.

CONCLUSION

In short, Information Communication Technology tools contribute to high quality lessons since they have the potential to increase students´ motivation, connect students to many information sources, support active in-class and out-class learning environments and fosters digital competence.

Finally, STEM learning brings an element of creativity to the classroom and encourages students to explore new ways of learning. Therefore, the combination of ICT tools with STEM activities are a great asset in education every school should implement.