

Proyecto Final AICLE INTEF: The secondary sector

The secondary sector



En este post voy a tratar de desarrollar el proyecto final para el curso de AICLE INTEF, con el desarrollo de un artículo sobre la unidad didáctica que he estado trabajando en el mismo.

Esta unidad didáctica denominada "The secondary sector" va dirigida al curso de 3º ESO para la materia Geography.

A lo largo de dicha unidad se tratará de trabajar el sector secundario a través de una unidad basada en la **metodología** AICLE, con unos **objetivos** muy concretos, como son comparar las fuentes de energía tradicionales con las nuevas alternativas o distinguir cuáles son energías renovables y cuáles no, junto con los diferentes tipos de cada una:

1. To compare alternative and traditional energy sources.

2. To distinguish the different types of renewable and non-renewable energy.

Los **contenidos** a trabajar relacionados con los objetivos anteriores serían las principales fuentes de energía, la energía tradicional y la alternativa, junto con las renovables y no renovables, que concretamos en los siguientes:

1. The principal energy sources.
2. The conventional and alternative energy sources.
3. Renewable and non-renewable energy.

En cuanto a la **periodización** se tratará de conseguir a lo largo de un total de cinco sesiones, que incluirán una sesión inicial con actividades de scaffolding y comprobación de conocimientos previos, otras tres para el desarrollo propio de la unidad, con explicaciones por parte de la profesora, actividades de desarrollo como las que se exponen a continuación, y una sesión final con una serie de pruebas para comprobar los conocimientos y destrezas tanto orales como escritas adquiridas por el alumnado.

Entre las **actividades** destacamos la atención a todas las habilidades del alumnado con:

Read different texts about the secondary sector (book and web pages);

Write writing about the secondary sector using the previous structures;

Listen the teacher, the auxiliary, the classmates and some internet resources;

Speak during the class with the other classmates, the conversation assistant and the teacher.

Junto con la utilización de las Nuevas Tecnologías para por ejemplo el visionado de un video en Youtube (<https://www.youtube.com/watch?v=pBTnVoElb98>) y otras como puedan ser responder de manera escrita a una serie de cuestiones tales como: Where does the main source of energy for Earth come from? a) Plants b) The Sun c) Fossil fuels d) Power stations.

Se procurará emplear una amplia variedad de **recursos**, que van desde los más tradicionales: pizarra del aula, libro de texto,... hasta las últimas tecnologías de las que disponga el centro: conexión a internet para:

- El visionado de videos
http://www.teachertube.com/viewVideo.php?video_id=169099,
- La consulta en diccionarios on-line como <http://blachan.com/shahi/>,
- Escuchar podcasts sobre el sector secundario
<http://www.symbaloo.com/radio/radiostream.do?smarkId=125714921&desktopId=1000004005307522> ,...),

Y la pizarra digital para el visionado de estos videos o la audición de los podcasts.

Template to design a CLIL didactic unit

Subject: Geography

Teacher: Ana Jiménez

Title of the Unit **The secondary sector**
ESO

Course / Level **3rd**

1. Learning outcomes / Evaluation criteria	To compare alternative and traditional energy sources. To distinguish the different types of renewable and non-renewable energy.
2. Subject Content	The principal energy sources. The conventional and alternative energy sources. Renewable and non-renewable energy.
	3. Language Content / Communication

Vocabulary	Adjectives: capital (good); conventional; heavy (industry); light (energy); raw; renewable; thermal; Nouns: biomass; coal; consumer; electricity; fossil; gas; geothermal; hydroelectric; hydropower; material; oil; outsourcing; reservoirs; source. Verbs: to concentrate; to recover; to restructure.
Structures	· Routines: Have you ever visited a factory? If yes, do you know how they work? Is anybody of your family working in one industry? · Contents: Express possibility. Describe processes. Give examples. · Classroom management: Good morning, did you have a nice Easter? Do you remember what we said in the last classroom about the renewable energies? Underline what are the renewable energies in this exercise. Makes it sense? Congratulation! It is a good job! Finish this activity about the different types of industries at home. See you tomorrow; make sure you put away all your things!
Discourse type	Reading, writing, listening and speaking.
Language skills	Read different texts about the secondary sector (book and web pages); Write a writing about the secondary sector using the previous structures;

	Listen the teacher, the auxiliary, the classmates and some internet resources; Speak during the class with the other classmates, the auxiliary and the teacher.
4. Contextual (cultural) element	Make some questions in L2 (English) about the secondary sector in Miajadas, such as: “Are there any industry?” “Do you know anybody working there?”, etc. To connect with their cultural context.
5. Cognitive (thinking) processes	To Know, understand and apply the different knowledge that the students have acquire about the points of the unit.
6. (a) Task(s)	The final task will be to answer and complete these questions: 5. What is the name given to the source of energy created with the burning plant or animal waste? 6. Which energy source is derived from the movement of sea water in and out of turbines to generate electricity? 7. What is the name of the renewable energy supply generated by capturing sunlight in panels that convert the sunlight into electricity? 8. What is the name of the renewable energy source generated from using volcanic heat found under the earth's surface? 9. What natural resource is harnessed to generate hydro-electric power (HEP)?

Renewable energy sources

_____ **energy sources** are sources of _____ that quickly replenish themselves and can be used _____ and again. For this reason they are sometimes called **infinite energy resources**.

_____: Energy from sunlight is captured in solar panels and converted into _____.

Advantages: Potentially infinite energy supply. Disadvantages:

Manufacture and implementation of _____ can be costly.

Wind: Wind turbines (modern windmills) turn _____ into electricity.

_____: Potentially infinite energy supply.

Disadvantages: Manufacture and implementation of _____ can be costly.

Tidal: The _____ of sea water in and out drives turbines. Advantages: to

_____ a lot of energy this way. Disadvantages:

Construction can be

_____. May be opposed by local or environmental groups

Geothermal: It is possible to use the heat of under the earth in _____ regions.

Steam can be used for heating or to power turbines creating electricity. Advantages:

Potentially _____ energy supply. It is used successfully in some _____, such as New

Zealand. Disadvantages: Can be _____ to set up. Only works in areas of volcanic activity.

6. (b) Activities

The students will watch this video

(<https://www.youtube.com/watch?v=pBTnVoElb98>)

and answer the following questions:

1. Where does the main source of energy for earth come from?

- a) Plants (producers)
- b) The Sun
- c) Animals (consumers)
- d) Fossil fuels
- e) Power stations

2. Which of the following is a type of renewable energy:

- a) Geothermal energy
- b) Nuclear energy
- c) Solar energy
- d) Wind power
- e) Hydro-electric power (HEP)

3. Energy resources that, once used, can replenish themselves and can be used again and again are called:

- a) Non-renewable
- b) Renewable
- c) Finite
- d) Potential
- e) Infinite

4. Which of the energy sources listed is not a renewable source of energy?

- a) Oil
- b) Solar
- c) Wind

	d) Coal e) Geothermal
	7. Methodology
Organization and class distribution / timing	The students will work individually the final task, but in groups of two when they answer the other activities.
Resources / Materials	Internet (youtube), smart board, texts with the material about renewable and non-renewable energy.
Key Competences	Learn to learn.
8. Evaluation (criteria and instruments)	To know how to compare alternative and traditional energy sources. To be able to distinguish the different types of renewable and non-renewable energy.

Ana Jiménez Ávila