Introducing the SDGs in Foreign Language Teacher Education through Moodle and H5P

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Contents

Background

A Moodle-based learning situation focusing on the SDGs

Method

Preliminary results

Limitations

Background

The 2030 Agenda establishes 17 Sustainable Development Goals (SDGs) that aim to achieve a better and more sustainable future for all.

The SDGs are interlinked

The role of universities

20th century: teaching and research

"Higher education will be a key actor in meeting the United Nations' Sustainable Development Goals (SDGs) by 2030" (European Higher Education Area Ministerial Conference, 2020, p. 4).

The SDGs are important for all university students, but they can be even more important for pre-service teachers.

What's H5P?

H5P stands for HTML5

H5P allows to create, share, reuse and modify interactive content

H5P is **quite easy to use**

It is multiplatform

Content Types

View all   Larger Resources   Other   Tasks

Accordion
Create vertically stacked expandable items

Advent Calendar (b...
Create an advent calendar

Agamotto
Create a sequence of images that gradually

AR Scavenger
Augmented reality fun!

Arithmetic Quiz
Create time-based arithmetic quizzes

Audio Recorder
Create an audio recording

Chart
Quickly generate bar and pie charts

Collage
Create a collage of multiple images

Column
Column layout for H5P Content

Cornell Notes
Take notes using the Cornell system

Crossword
Create a crossword puzzle

Dialog Cards
Create text-based turning cards

Dictation
Create a dictation with instant feedback

Documentation Tool
Create a form wizard with text export

Drag and Drop
Create drag and drop tasks with images

https://h5p.org/content-types-and-applications

Pedagogical potential of H5P

Some studies (Casañ-Núñez et al., 2021, 2022; Chen et al., 2021; Jacob & Centofanti, 2023, Muñoz Candela, 2021; Wicaksono et al., 2021) suggest that H5P has pedagogical potential in the field of education.

Pre-service teachers (n=135) report that H5P activities are fun, interactive, visually attractive and motivating (Casañ-Núñez et al., 2022)

LMS integration – Digital privacy

One tool - more than 60 content types

Optional tracking (many H5P activities)

Optional tracking in Moodle (many H5P activities)

500 miles (fill in the blanks)

View all attempts (122 submitted)

Listen to the song and fill in the missing words

500 miles

When I [   ], well I know I'm gonna be,
I'm gonna be the man who wakes up [   ]

| Marta | Monday, 20 February 2023, 5:26 PM | 92% | View user attempts (4) |

Highest score attempt

#	Date	Score	Max score	Duration	Completion	Success	Report
4	20 February 2023, 5:26 PM	23	25	13 minutes 33 seconds	☑		View report

All user attempts

#	Date	Score	Max score	Duration	Completion	Success	Report
1	20 February 2023, 5:26 PM	20	25	12 minutes 47 seconds	☑		View report
2	20 February 2023, 5:26 PM	20	25	13 minutes 6 seconds	☑		View report
3	20 February 2023, 5:26 PM	22	25	13 minutes 21 seconds	☑		View report
4	20 February 2023, 5:26 PM	23	25	13 minutes 33 seconds	☑		View report

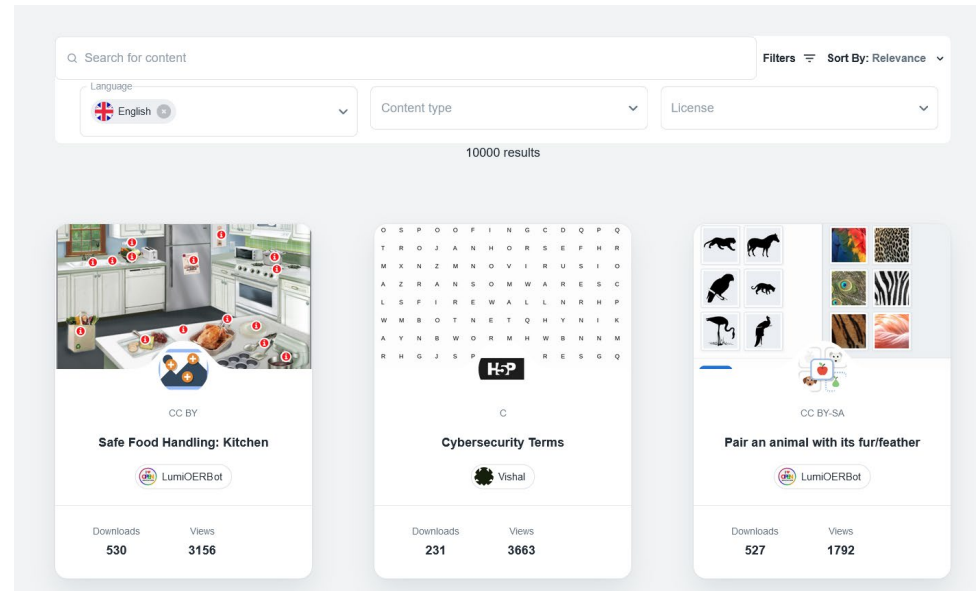| Matching choice	Correct answer	Attempt answer
Gap #1	wake up	✔ wake up
Gap #2	next to you	✔ next to you
Gap #3	the man	✔ the man
Gap #4	drunk	✔ drunk
Gap #5	man	✔ man
Gap #6	drunk	✔ drunk
Gap #7	havering	✔ havering
Gap #8	walk	✘ roll
Gap #9	thousand	✔ thousand
Gap #10	door	✔ door
Gap #11	working	✔ working
Gap #12	money	✔ money
Gap #13	penny	✔ penny

Disadvantages

A device and internet are needed

Time needed to learn to create H5P content and to create each activity

However, it is easy to share and edit H5P content

Free H5P content hubs (H5P.org and Lumi Education)

H5P.com – AI-powered content creation tool (not free)

https://app.lumi.education/search

ChatGPT can help us to create a few H5P content types (for example, H5P summary)

Generative AI and H5P (Griff With, 2023) - https://www.youtube.com/watch?v=pjWVpqqErSc

Will be displayed above the summary task.

Choose the correct statement.

Summary *

Textual | Default

▾ Set of statements

List of statements for the summary - the first statement is correct. *

Statement

Florence, also known as Firenze in Italian, is a city located in the Tuscany region of Italy.

Statement

The Leaning Tower of Pisa is a famous landmark in Florence.

Statement

The city is renowned for its beautiful canals and gondolas.

Statement

Florence

Introduction text *

Will be displayed above the summary task.

Choose the correct statement.

Summary *

Textual | Default

Florence, also known as Firenze in Italian, is a city located in the Tuscany region of Italy.
The Leaning Tower of Pisa is a famous landmark in Florence.
The city is renowned for its beautiful canals and gondolas.
Florence is the capital city of Italy.

The Florence Cathedral, also known as the Duomo, is a famous architectural masterpiece located in the heart of the city.
Florence is famous for its delicious Neapolitan pizza.

How can I help you today?

Tell me a fun fact about the Roman Empire	**Make up a story** about Sharky, a tooth-brushing shark superhero
Write a course overview psychology behind decision-making	**Show me a code snippet** of a website's sticky header

I am using H5P to create interactive summary tasks. H5P presents statements in random order where one statement is correct and the other are false. The user is to pick the correct statement and then a new set of statement is presented for the user to pick from until the user has created a nice summary.

Please create a summary of Florence. In the end the user should end up with 5 correct statement, so create 5 sets of statements. In each set please add 3 incorrect statements. This is the format H5P expects: Write each statement on a separate line. Use an empty line to separate sets of statements. First statement is always correct. Do not add any labels, formatting or numbering

Prompt based on Griff With (2023)

Please create a summary of Florencia (Italy). In the end the user should end up with 3 correct statement, so create 3 sets of statements. In each set please add 3 incorrect statements. This is the format H5P expects: Write each statement on a separate line. Use an empty line to separate sets of statements. The first statement of each set is always correct. Do not add any labels, formatting or numbering

ChatGPT

Certainly, here are three sets of statements about Florence, Italy, with each set containing one correct statement and three incorrect state[ments] interactive summary task:

Set 1:

Florence, also known as Firenze in Italian, is a city located i[n...]

The Leaning Tower of Pisa is a famous landmark in Florenc[e]

The city is renowned for its beautiful canals and gondolas.

Florence is the capital city of Italy.

Florence

Introduction text *

Will be displayed above the summary task.

Choose the correct statement.

Summary *

| Textual | Default |

Florence, also known as Firenze in Italian, is a city located in the Tuscany region of Italy.
The Leaning Tower of Pisa is a famous landmark in Florence.
The city is renowned for its beautiful canals and gondolas.
Florence is the capital city of Italy.

The Florence Cathedral, also known as the Duomo, is a famous architectural masterpiece located in the heart of the city.
Florence is famous for its delicious Neapolitan pizza.

Choose the correct statement.

Progress: 0/3

Florence, also known as Firenze in Italian, is a city located in the Tuscany region of Italy.

The city is renowned for its beautiful canals and gondolas.

The Leaning Tower of Pisa is a famous landmark in Florence.

Florence is the capital city of Italy.

A Moodle-based learning situation focusing on the SDGs

Participants

Pre-service teachers enrolled on **face-to-face** English as a foreign language course

1st-year university students

Dual nature course: linguistic and educational

3 groups

Main goals of the learning situation

Become familiar with the SDGs

Reflect on the relative importance of each SDG

Reflect on how one can contribute to achieving the SDGs

Reflect on the role of teachers in achieving the SDGs

Foster that students design activities incorporating one or several SDGs and H5P content

Improve students' level of English

Selection of activities

1. Building vocabulary related to sustainability (H5P activities)

Drag the words

_____ Collect rubbish/litter to treat it and produce useful materials that can be used again.

_____ damage caused to water, air, etc. by harmful substances (usually from big factories) or waste.

_____ to remove dirt from something.

_____ an unnecessary or wrong use of substances, energy...

_____ a system of vehicles such as buses, trains, undergrounds, used to go from one place to another.

_____ something made in a way that causes a little or no damage to the environment.

_____ something not harmful to the environment, or something that tries to help the environment.

_____ energy produced using the sun, wind, etc. to avoid using fuels (oil, coal...)

_____ : something able to decompose naturally without harming the environment.

| Biodegradable |
| Public transport |
| Renewable energy |
| Waste |
| Clean |
| Recycle |
| Pollution |
| Sustainable |
| Eco-friendly |

Check

Find the words from the grid

S	U	S	T	A	I	N	A	B	L	E
Z	S	C	C	Y	G	R	E	N	E	P
R	E	D	N	E	G	P	E	A	C	E
V	U	L	E	Q	U	A	L	I	T	Y
E	N	V	I	R	O	N	M	E	N	T
U	C	L	I	M	A	T	E	I	E	Z
Q	O	Q	J	U	S	T	I	C	E	D
H	T	L	A	E	H	J	I	T	Q	N
W	E	L	L	B	E	I	N	G	B	A
S	R	E	N	E	W	A	B	L	E	L
N	O	I	T	P	M	U	S	N	O	C

Find the words

sustainable
climate
peace
wellbeing
gender
equality
energy
environment
health
renewable
consumption
justice
land

Time Spent : **0:00**

0 of 13 found

Check

2. Discovering the SDGs (based on Maley and Peachey, 2017)

2.1. Brainstorming.
What do you think are the biggest problems of the world today? (Moodle page)

2.2. Introducing the SDGs. Short video produced by United Nations
https://www.youtube.com/watch?v=K-i6Mn6358E (Moodle page)

2.3. The SGDs - do you remember the names of the SDGs?
(H5P image juxtaposition)

2.4. SDGs names and goals (H5P drag and drop and H5P drag the words)

Check

SDGs 6, 12, 13, 14 and 15 - theme of the planet

Drag the words into the correct boxes

[_____] Ensure availability and sustainable management of water and sanitation for all.

[_____] Ensure sustainable consumption and production patterns

[_____] Take urgent action to combat climate change and its impacts.

[_____] Conserve and sustainably use the oceans, seas and marine resources for sustainable development

[_____] Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 14 Life below water   Goal 6 Clean water and sanitation   Goal 15 Life on land

Goal 12 Responsible consumption and production   Goal 13 Climate action

Check

SDGs 7-11 - theme of prosperity

Drag the words into the correct boxes

[   ] Ensure access to affordable, reliable, sustainable and modern energy for all

[   ] Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

[   ] Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

[   ] Reduce inequality within and among countries

[   ] Make cities and human settlements inclusive, safe, resilient and sustainable

| Goal 7 Affordable and clean energy |
| Goal 8 Decent work and economic growth |
| Goal 11 Sustainable cities and communities |
| Goal 10 Reduced inequalities |
| Goal 9 Industry, innovation and infrastructure |

✔ Check

SDGs 16-17 – themes of peace and partnership

Drag the words into the correct boxes

[   ] Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

[   ] Strengthen the means of implementation and revitalize the global partnership for sustainable development

| Goal 16 Peace, justice and strong institutions |
| Goal 17 Partnerships for the Goals |

3. The most important Sustainable Development Goal for you

3.1. What is the most important SDG for you? Give reasons for your choice. What can you do to help achieve the SDGs?

a) Write a short text (50 - 80 words)   (Moodle assignment)

Or

b) Record an audio (15-30 seconds)   (H5P audio recorder and
                                                                    Moodle assignment)

Audio recorder

Presione un botón debajo para grabar su respuesta.

00:00

● Grabar

3. 2. Get ready to share your opinion with your classmates (class discussion)

Other activities in the learning situation

Reflecting on the role of teachers in achieving the SDGs   (they are pre-service teachers)

Designing a poster or infographic in groups about the SDGs to raise awareness

Poster designed
by students
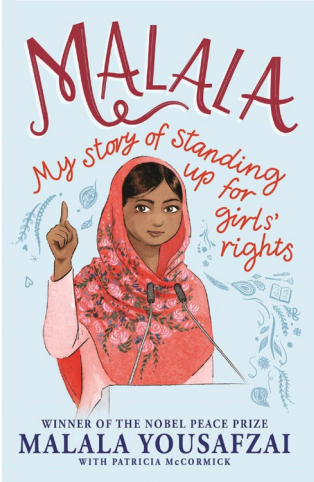
Follow-up assignments

Activities around the book *Malala. My story of standing up for girls' rights*

Designing activities incorporating at least one SDG and one H5P activity

Drag images from the left to match them with corresponding images on the right

THE 3R

Furió, H., García, B., Gómez, J., González, A., Olmeda, M., Peñalva, I and Sánchez, C.

✔ Check

Content created by students

Method

Participants' knowledge about the SDGs was tested before and after the learning situation (feedback activity)

A questionnaire was used to gather participants' opinions on the learning situation (feedback activity)

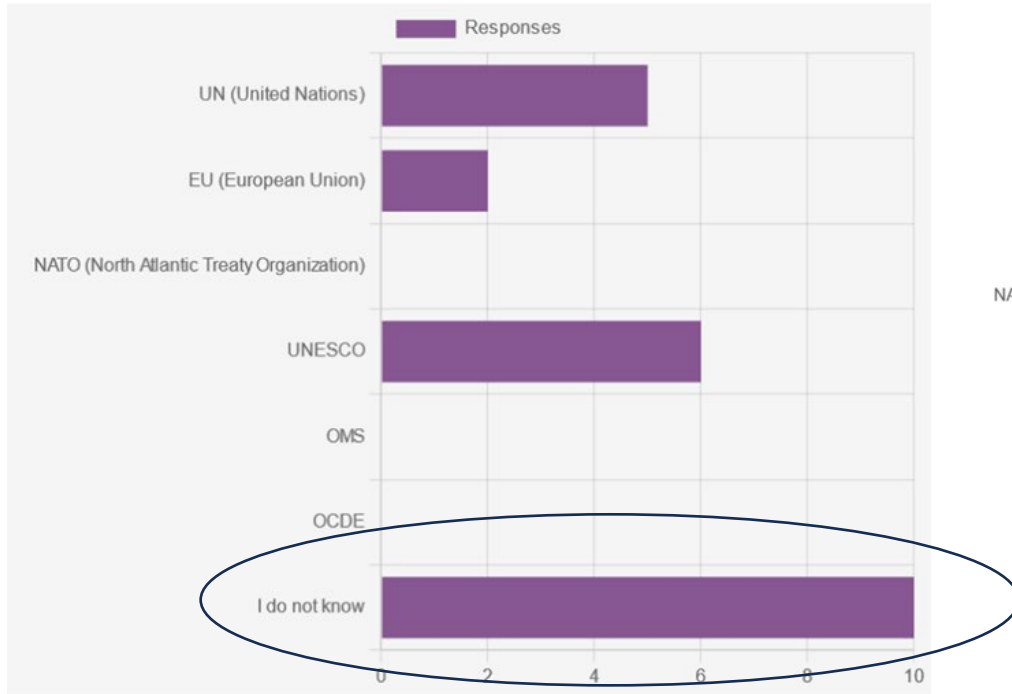# Preliminary results (some items, one group)

Before the learning situation

Have you ever heard about the SDGs? Where? You can tick more than one answer.
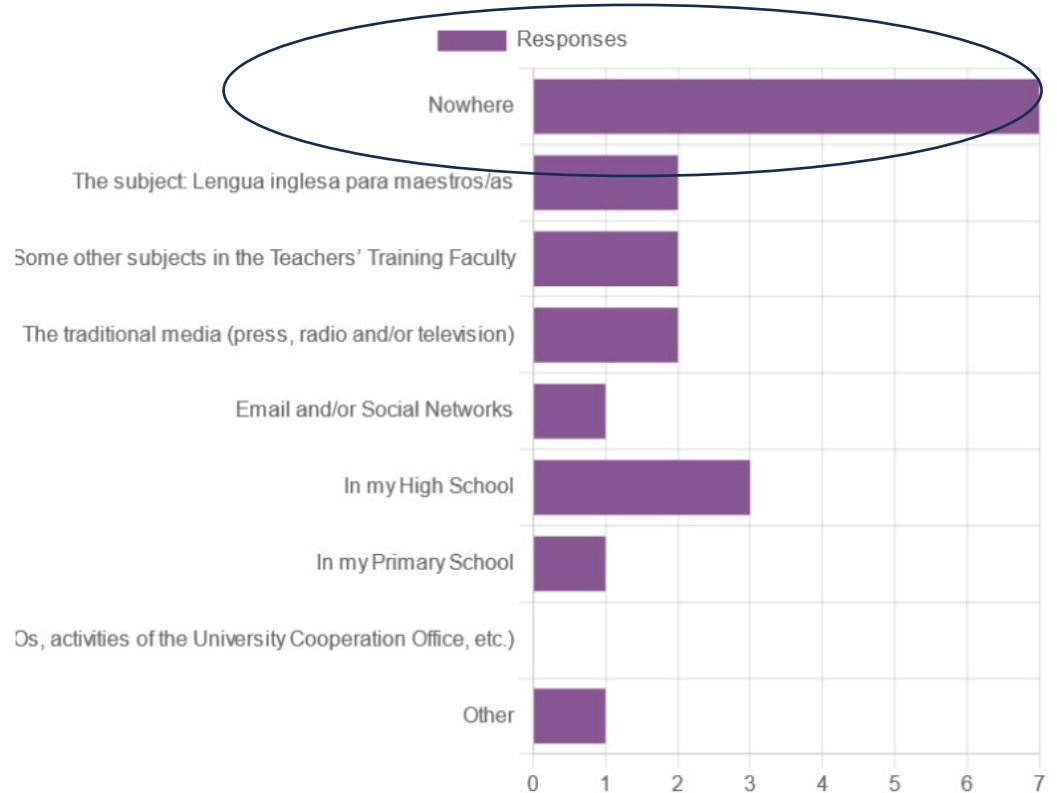
The SDGs are an initiative of …

Before the learning situation

After the learning situation

How many SDGs are there?

Before the learning situation

- 10
- 17
- 30
- 10
- 17
- 17
- 20
- 17
- 25
- 10
- 17
- 10
- 17
- 17
- 17
- 0
- 17
- 17
- 17
- 17
- 17
- 17
- 17

Average: 16.09

After the learning situation

- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17
- 17

Average: 17.00
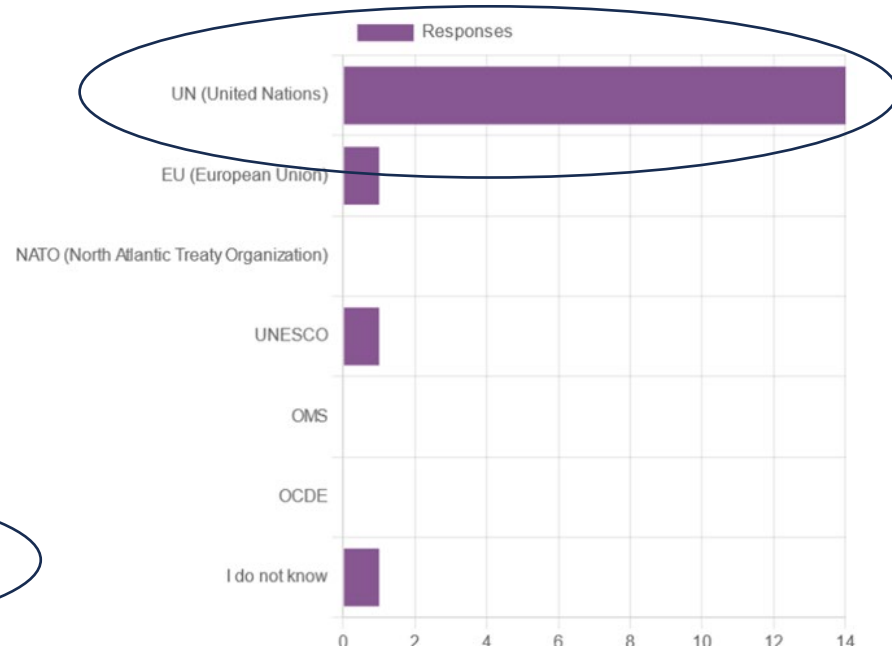
What does circular economy mean?

Before the learning situation

- I don't know
- I don't know
- I don't know
- I don't know
- I don't know
- i don't know
- a
- proceso donde la economía rota por la sociedad
- I don't know
- Es un modelo de producción y consumo que implica com
posible.
- Que todo el dinero que se invierte regresa
- An economy based on a way where te money always goe
- Reciclar materials per a produir productes
- Economia circular es como todas las acciones estan relaci
- reciclar los residuos
- es aquel tipo de economia que fomenta la ultilización tan

After the learning situation

- It means to reuse a product, for example the gadgets, not to replace them,
- Reuse, Recycle and avoid great waste.
- REUTILIZAR LOS MATERIALES O LOS OBJETOS QUE USAS PARA NO MALGA
- Reciclan y reutilizan los materiales.
- Reusing the break objects
- reciclar los objetos ja usados para no contaminar
- economía en la que se tiene el medio ambiente a través de procesos como
- Reuse what you have
- La economia circular , se produce con un consume responsable y un recicla
- I don't know
- Reciclar lo que tienes, no tirar reparar
- como reutilizar lo usado para renovarlo para el uso de otros
- Economia circular es aquella la cual vela por la reutilización de los product
biodegradables posibles, es decir, aquella que vela por nuestro planeta.
- Al contrario que la otra. Se cumplen las 3 y mejora el medio ambiente
- Producción de productos utilizando unos que ya se han usado

On a scale of 1 to 5 (1 being not important and 5 being very important), to what extent do you think **it is important to introduce activities related to the SDGs in the subject**?
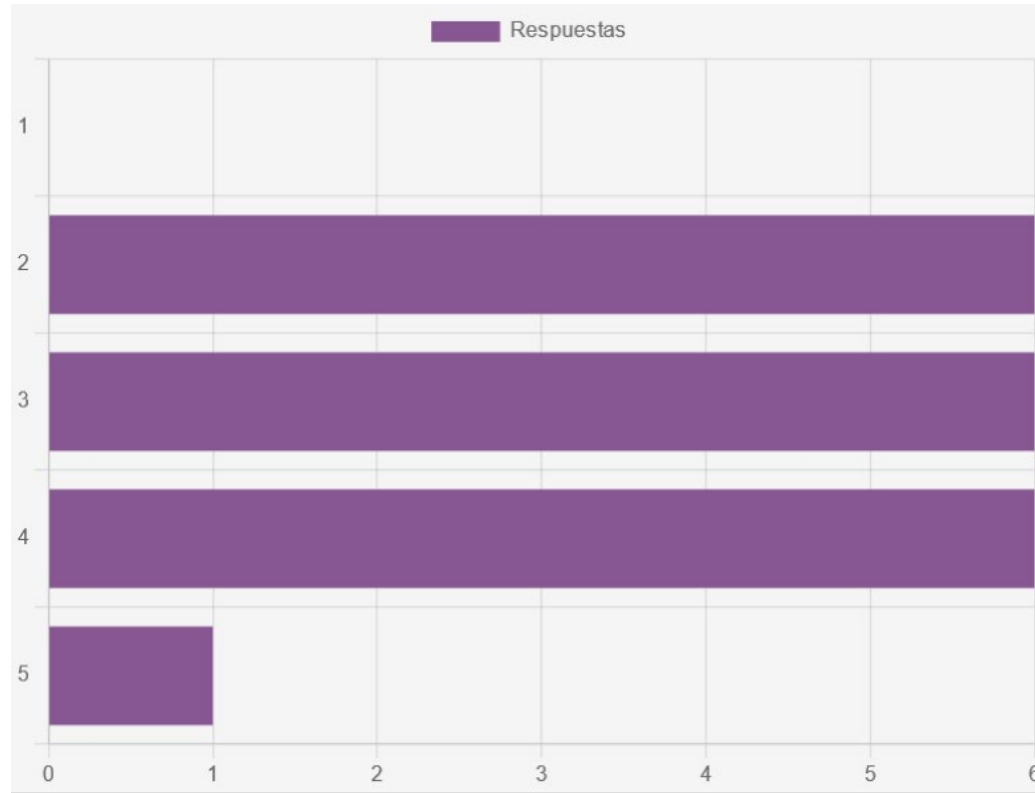
On a scale of 1 to 5, where 1 is strongly disagree and 5 is strongly agree, to what extent do you think the **H5P activities have helped you improve your knowledge about the SDGs?**
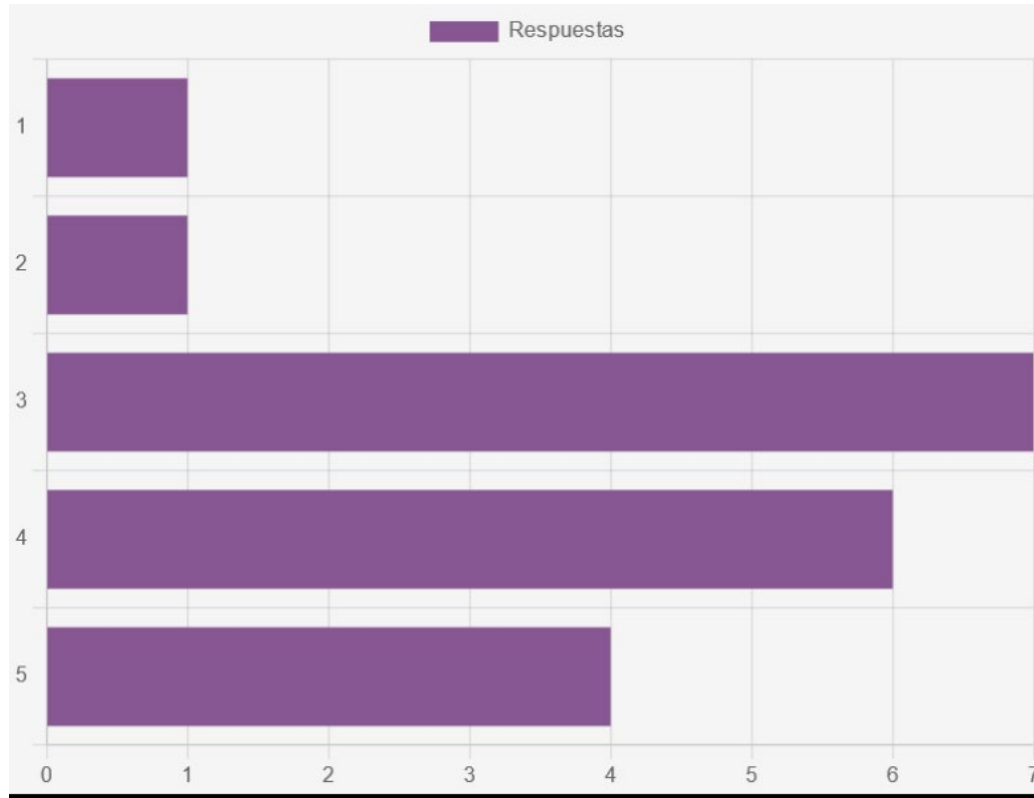
On a scale of 1 to 5, where 1 is little and 5 is a lot, **to what extent have you been motivated to complete the H5P activities?**
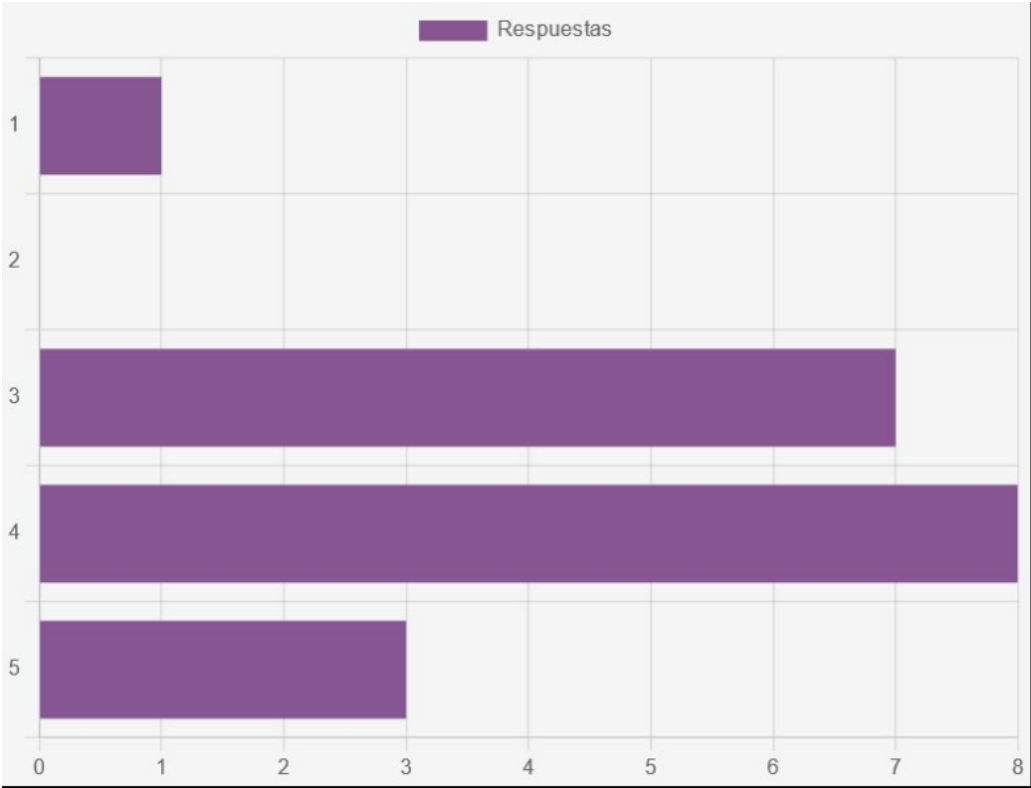
Main limitations

No control group

Short test about the SDGs

Small sample

R+D project

Name: H5P interactive content and Sustainable Development Goals in foreign language teaching, social sciences and pre-service teachers' education (Reference: CIGE/2021/131)

Funding: Generalitat Valenciana (Spain)

Website: https://ci5ods.blogs.uv.es/

Contenido interactivo H5P y ODS en la enseñanza de lenguas extranjeras, de las ciencias sociales y en la formación de futuros/as docentes

El proyecto de I+D+I *Contenido interactivo H5P y ODS en la enseñanza de lenguas extranjeras, de las ciencias sociales y en la formación de futuros/as docentes* (CIGE/2021/131) es una iniciativa del Grupo de Investigación TALIS – Enseñanza y adquisición de competencias solidarias e interculturales a través de las lenguas y la literatura (GIUV2015-218) y está financiado por la Conselleria de Educación, Universidades y Empleo de la Generalitat Valenciana en 2022 y 2023

Digital book with 8 lesson plans to teach EFL in secondary education

Each lesson contains at least one SDG and one H5P activity

Book - Free download

UNIT 1

TURNING LONDON INTO A SUSTAINABLE CITY

LEARNING SITUATION AEM2:
3RD OF ESO

Rebeca Hernández
Inés Llario
Alba Torres
Núria Borràs
Raquel Mengual

THE GLOBAL GOALS

LESSON PLAN 2

Activity 1. Scan the QR and do the activity. Drag the image to its respective column. What is good for the environment? What isn't?

Here you have the link in case you are not using your phone!

https://app.Lumi.education/run/YCiYc6

Bad	Good

Difficulty level ★☆☆

https://roderic.uv.es/handle/10550/87705

TITLE: REINVENTING FAIRY TALES					
Grade	ESO	Course	3rd of ESO	Group	1
Subject:	First Foreign Learning - English	Link to other subjects	Literature, Arts & Crafts		
# of sessions:	10	Topic-theme /	Fairy tales		
Final output description	We have designed a unit about retelling fairy tales adapted to current times, so that students have to complete a dossier on retellings and their writing process and present a project on a rewritten fairy tale on a cereal box that will be exhibited in the school library for all students to see.				

LINKING WORDS

Linking words will help you to improve the quality of your retelling, as the piece as a whole will be more cohesionated. Complete the following exercise by dragging each word to its appropiate gap

Drag the words into the correct boxes

_____, a young prince went riding through the forest and came upon the tower. He looked up and saw beautiful Rapunzel at the window. _____ he heard her singing with such a sweet voice, he fell completely in love with her. _____, _____ there were no doors in the tower and no ladder could ever reach her high window, he fell into despair. _____, he went into the forest every day until one time he saw the fairy who called out:

"Rapunzel, Rapunzel,

let down your hair."

_____, he now knew what kind of ladder he needed to climb up into the tower. He took careful note of the words

but
One day
As a result
So
However
At first
Thus

Grazie per la vostra attenzione

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