

Supplementary Materials

Figure S1. Example simple games. Crosswords

Crossword 1. Difficulty level: easy

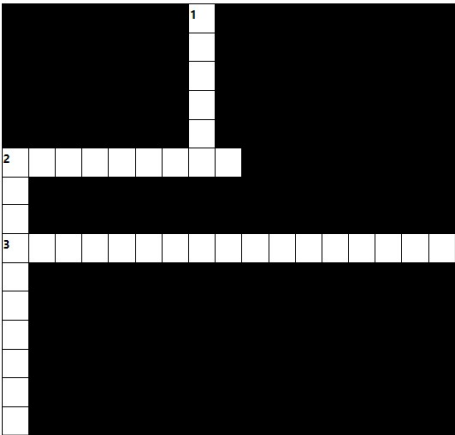
Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Across: 2: La neurona tiene terminaciones Enter Hint

Down: 2: El EEG es una exploración neurofisiológica que se basa en el registro de la actividad bioeléctrica cerebral en condiciones basales de reposo, en vigilia o sueño y es un método Enter Hint

2 Across. The neuron has _____ endings

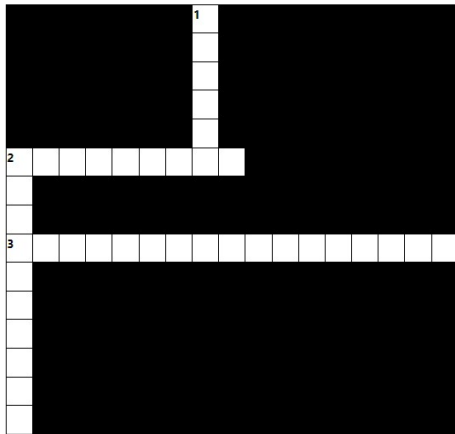
2 Down. EEG is a scan based on the recording of brain bioelectrical activity in resting, waking and basal conditions, and is a _____ method



Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Across: 3: La interconexión neuronal se produce por transmisión de los Enter Hint

3 Across. Neuronal interconnection occurs through transmission of the _____



Crossword 2. Difficulty level: intermediate

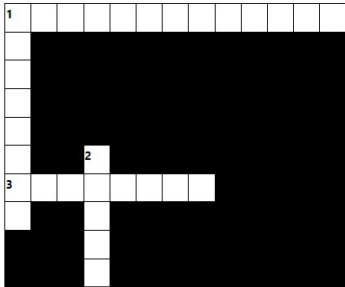
Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Across: 1: Entre los neurotransmisores más importantes podemos destacar la acetilcolina y la Enter Hint

Down: 1: La interconexión entre una neurona receptora y una neurona efectora s produce por transmisión del impulso Enter Hint

1 Across. The most important neurotransmitters include acetylcholine and _____

1 Down. The interconnection between a receptor neuron and an effector neuron occurs by transmission of the _____ impulse

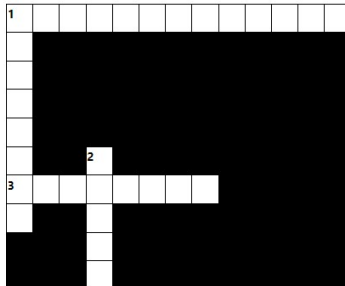


Check

Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Down: 2: El crecimiento cerebral obtiene el 95% aproximadamente de las características del cerebro adulto humano aproximadamente a la edad de Enter Hint

2 Down Brain growth obtains approximately 95% of the characteristics of the adult human brain at about the age of _____

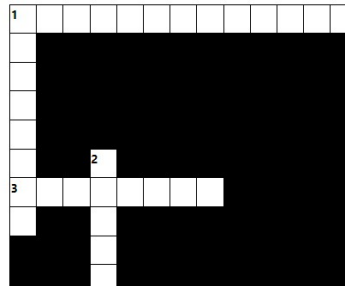


Check

Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Across: 3: La interconexión entre dos neuronas se denomina Enter Hint

3 Across. The interconnection between two neurons is called the _____



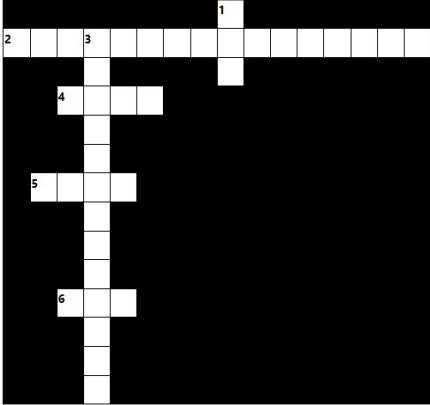
Check

Crossword 2. Difficulty level: Advanced

Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Down: 1: Es una técnica que registra la actividad funcional cerebral, mediante la captación de campos magnéticos, permitiendo investigar las relaciones entre las estructuras cerebrales y sus funciones. Enter Hint

1 Down. A technique that records functional brain activity by capturing magnetic fields, allowing investigation of the relationships between brain structures and their functions

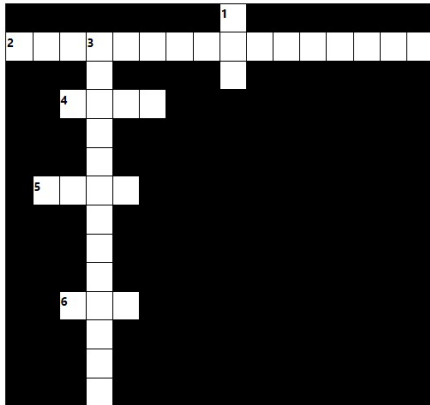


Check

Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Across: 2: Es una región cerebral en la que se desarrolla el procesamiento de alto nivel Enter Hint

2 Across. A brain region where high-level thinking takes place

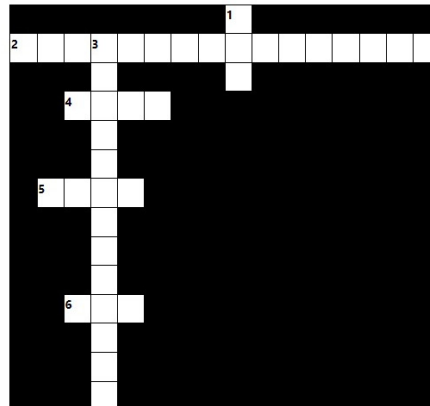


Check

Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Down: 3: La memoria a largo plazo se sitúa en el lóbulo Enter Hint

3 Down. Long-term memory is located in the ____ lobe

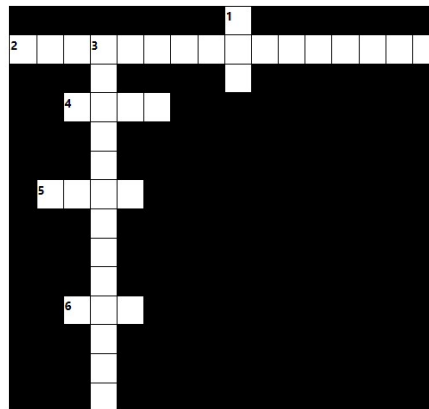


Check

Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Across: 4: Mide la actividad cerebral detectando los cambios asociados al flujo sanguíneo. Cuando una zona del cerebro está en uso, el flujo sanguíneo hacia esa región también aumenta. Enter Hint

4 Across. It measures brain activity by detecting changes associated with blood flow. When the area of the brain is in use, blood flow to that region also increases.

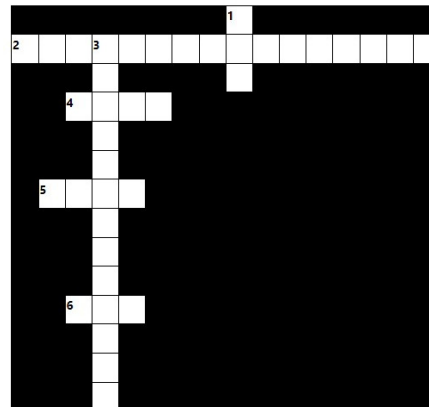


Check

Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Across: 5: Es una forma de imagen óptica que calcula los cambios en la oxigenación de la sangre y mide indirectamente los niveles de actividad en diferentes regiones del cerebro. Enter Hint

5 Across. A form of optical imaging which calculates the changes in blood oxygen and indirectly measures levels of activity in different areas of the brain.

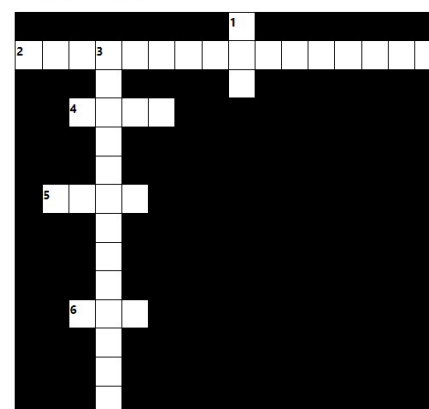


Check

Complete the crossword, then click on "Check" to check your answer. If you are stuck, you can click on "Hint" to get a free letter. Click on a number in the grid to see the clue or clues for that number.

Across: 6: Es una técnica que se utiliza en medicina nuclear. Esta utiliza un radiofármaco. Enter Hint

6 Across. A technique used in nuclear medicine. It uses a radiopharmaceutical.



Check

Figure S2. Example memory game using pictures.



Note: The task involves matching pictures correctly, with the student being given feedback.

Figure S3. True-false question.



Figure S4. Alphabet soup.

Encuentra las palabras en la cuadrícula

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

Find the words

sensoriomotor

simbólico

ocular

observación

exploración

Time Spent : 0:00

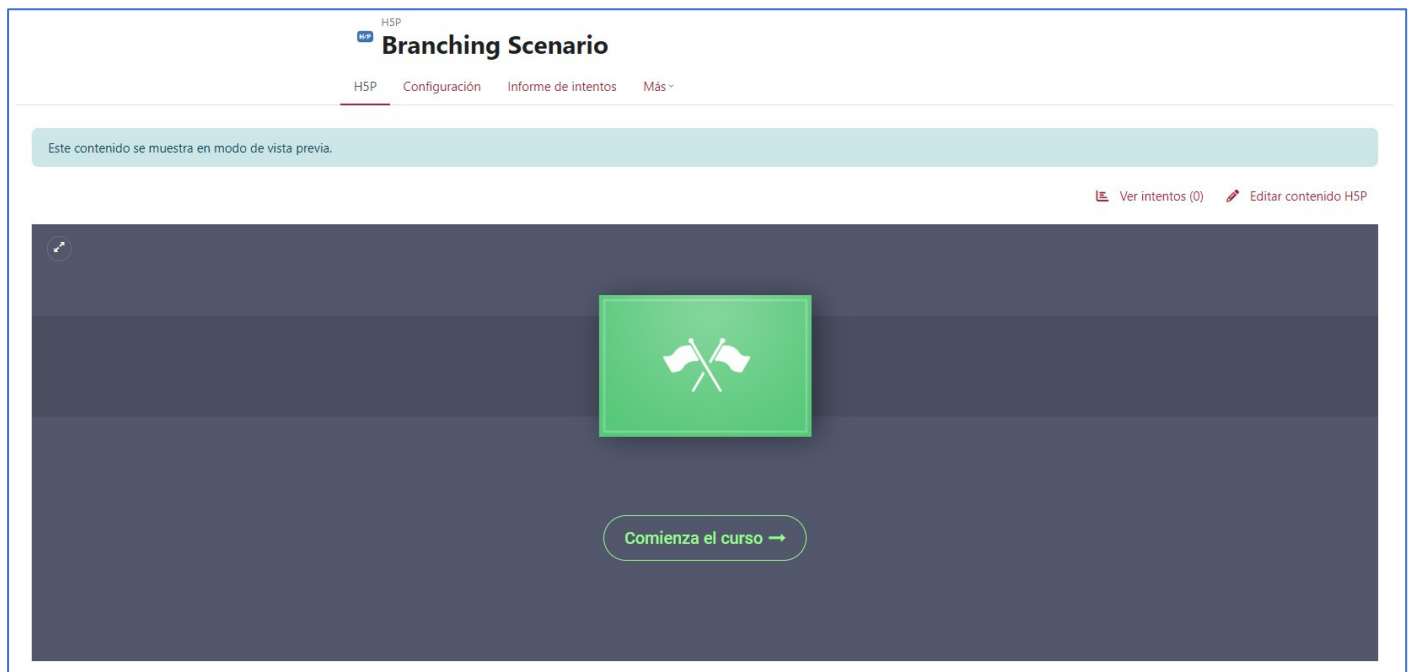
0 of 5 found

Check

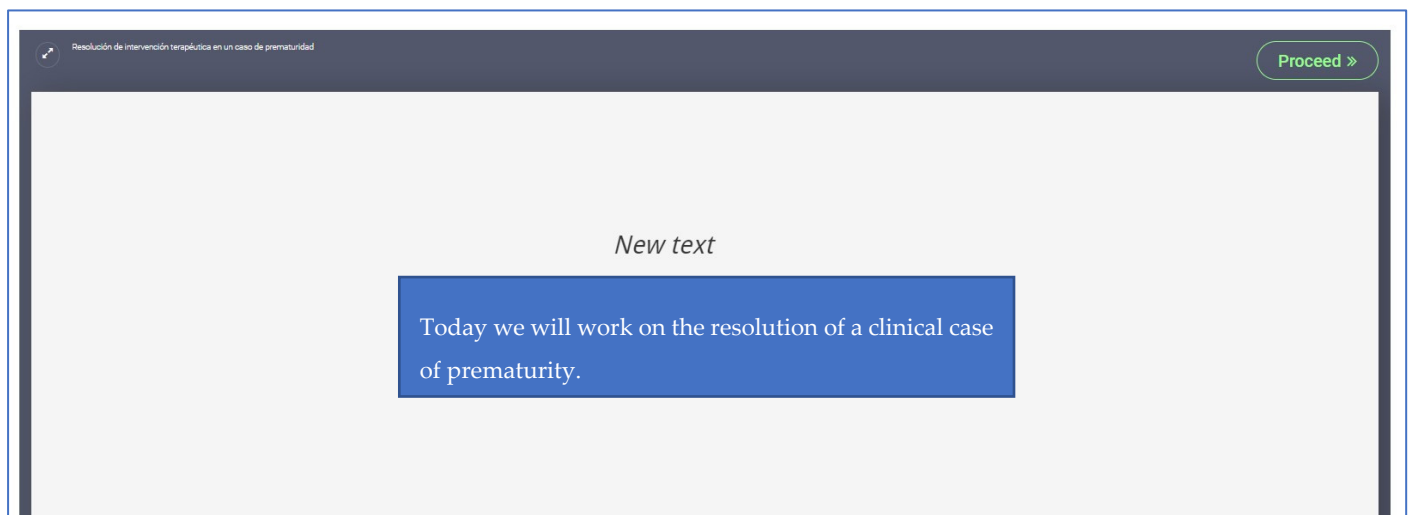
Figure S5. Branching scenario Group 1.

Group 1

Scene 1



Scene 2



Scene 3

Today we will work on the resolution of a clinical case of prematurity.



The screenshot shows the HSP Branching Scenario interface. At the top, there is a header with the HSP logo and the title "Branching Scenario". Below the header, there are tabs: "HSP", "Configuración", "Informe de intentos", and "Más". A light blue banner at the top of the main content area states "Este contenido se muestra en modo de vista previa." (This content is shown in preview mode). In the top right corner, there are two links: "Ver intentos (0)" and "Editar contenido HSP". The main content area has a dark blue background with a green "Proceed »" button in the top right corner. Below the button, there is a blue text box that reads: "This will be followed by a video on the intervention in a case of a child affected by prematurity."

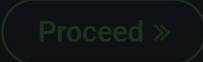
Scene 4


The screenshot shows the HSP Branching Scenario interface for Scene 4. At the top, there is a header with the HSP logo and the title "Branching Scenario". Below the header, there are tabs: "HSP", "Configuración", "Informe de intentos", and "Más". A light blue banner at the top of the main content area states "Este contenido se muestra en modo de vista previa." (This content is shown in preview mode). In the top right corner, there are two links: "Ver intentos (0)" and "Editar contenido HSP". The main content area has a dark blue background with a green "Proceed »" button in the top right corner. Below the button, there is a video player. The video player has a red play button in the center. The video shows a woman with blonde hair in a blue shirt, standing in front of a bookshelf and a whiteboard. A speech bubble from the woman says "The difference is 16 months". The video player has a title bar that reads "Conceptos clave de apoyo a la docencia." and a "Ver más ta..." link. There is also a "Compartir" (Share) button in the top right corner of the video player.


Note. An English version on this video can be found at https://www2.ubu.es/earlycare_t/en/project. Users will have to log into the virtual classroom (Aula Virtual) and navigate to Virtual Laboratory 1 Prematurity.

Scene 5

 Ver intentos (0)  Editar contenido H5P



 Conceptos clave de apoyo a la docencia.



¿Cuál es el área de desarrollo más afectada en el caso clínico?

Área de Desarrollo de la Comunicación y del Lenguaje

Área de desarrollo Cognitivo

Área de desarrollo Psicomotor

Área de desarrollo de la Autonomía Personal

Which area of development would be most affected?


Area of communication and language development

Area of Cognitive Development

Area of psychomotor development

Area of personal autonomy development

Scene 6

 **Branching Scenario**

H5P


Configuración


Informe de intentos

Más ▾

Correct answer

Psychomotor development area. Gap of 16 months. Difficulty in walking and fine psychomotor precision.





Respuesta Correcta

Área de desarrollo Psicomotor: Desfase de 16 meses. Dificultad en la deambulación y en la precisión psicomotora fina.

Scene 7

HSP

Branching Scenario

HSP

Configuración


Informe de intentos


Más ▾

Este contenido se muestra en modo de vista previa.

Ver intentos (0)

Editar contenido HSP



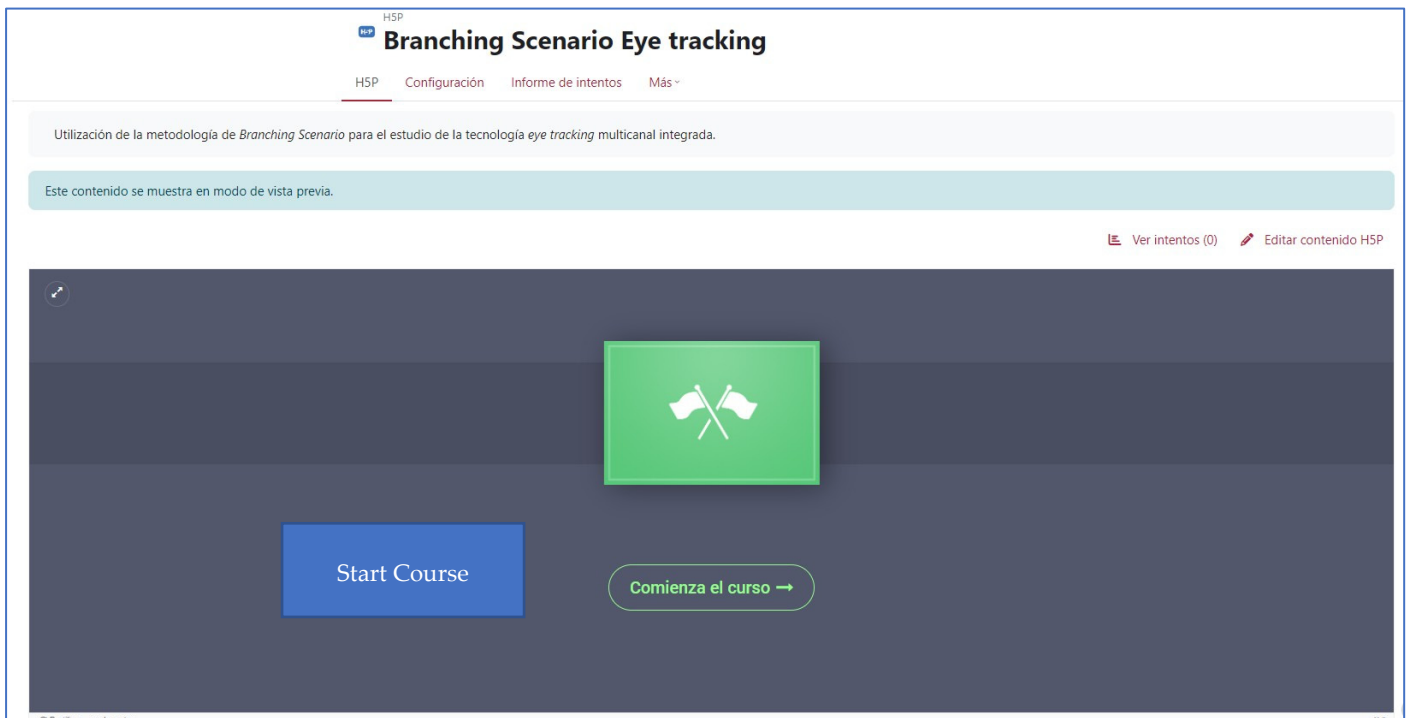


Restart the course

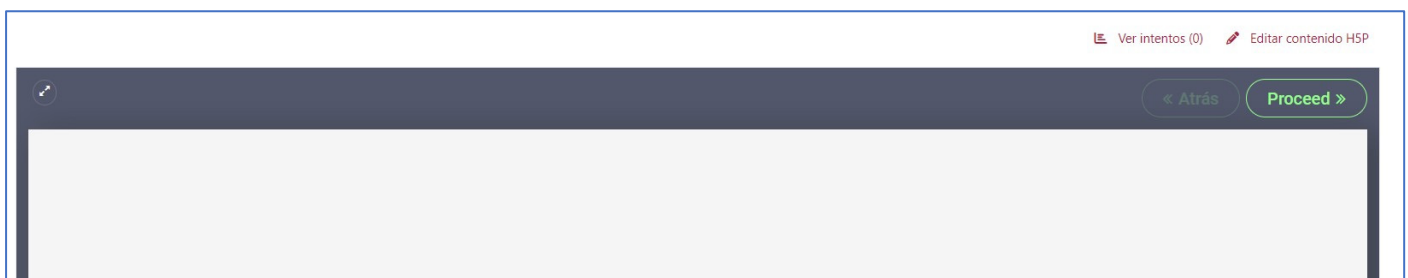
Reinicia el curso

Figure S6. Branching scenario Group 2.

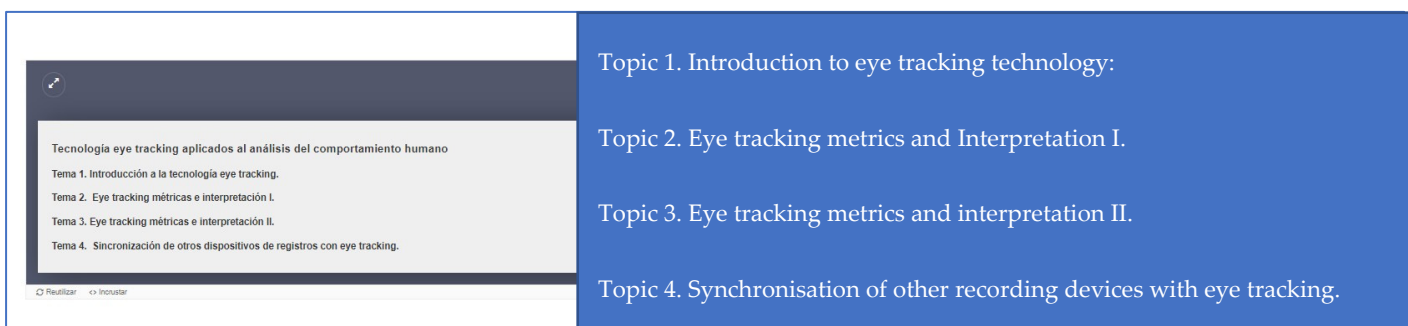
Scene 1



Scene 2



Scene 3



Scene 4

Tecnología eye tracking

Tema 1. Introducción a la tecnología eye tracking

Tema 2. Eye tracking métricas de interpretación I.

Tema 3. Eye tracking métricas de interpretación II.

Tema 4. Sincronización de eye tracking con otros registros.

¿Qué Tema quieres consultar?

Tema 1. Introducción a la tecnología eye tracking.

Tema 2. Eye tracking métricas de interpretación I.

Tema 3. Eye tracking métricas de interpretación II.

Tema 4. Sincronización de eye tracking con otros registros.

Ver intentos (0)

Editar contenido H5P

Topic 1. Introduction to eye tracking technology:

Topic 2. Eye tracking metrics and Interpretation I.

Topic 3. Eye tracking metrics and interpretation II.

Topic 4. Synchronisation of other recording devices with eye tracking.

Scene 5

« Atrás

Proceed »

¿Qué?

What?

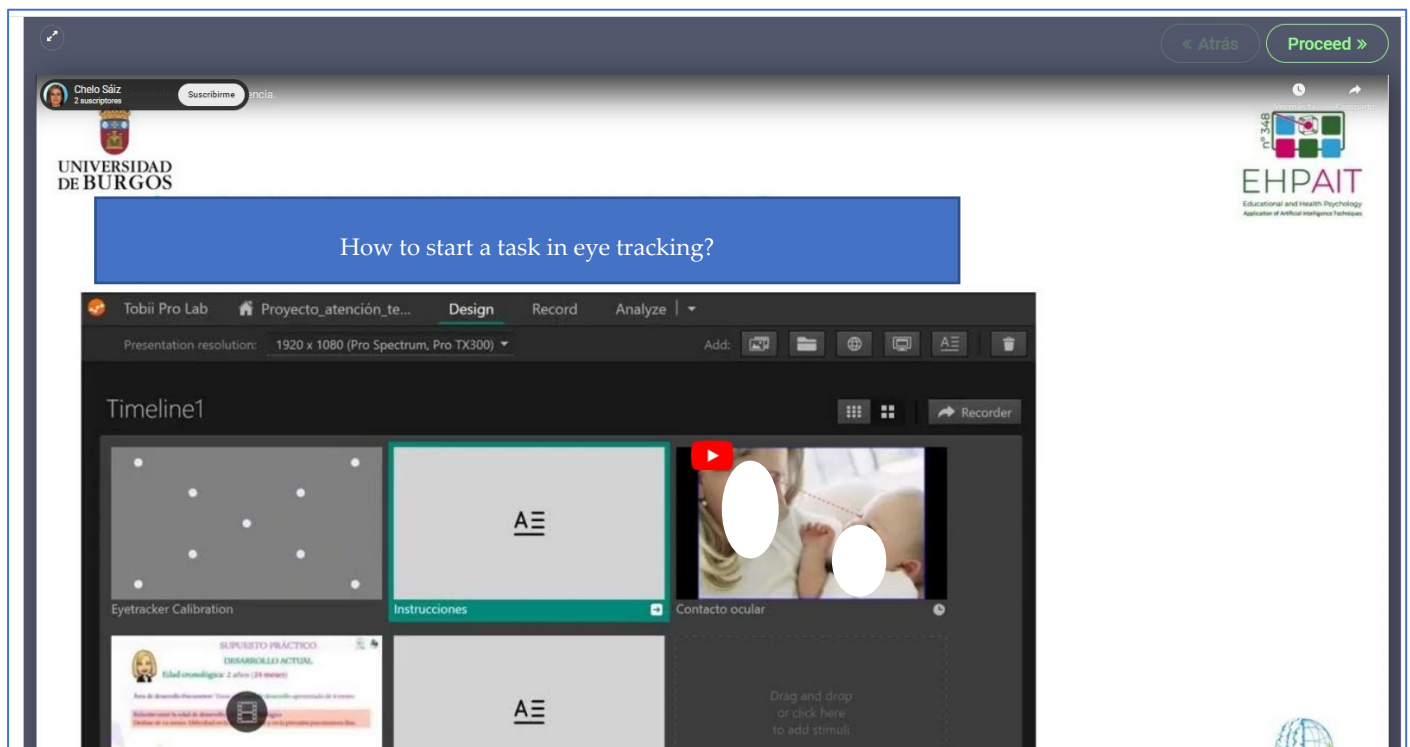
¿Cómo?

How?

¿Para qué?

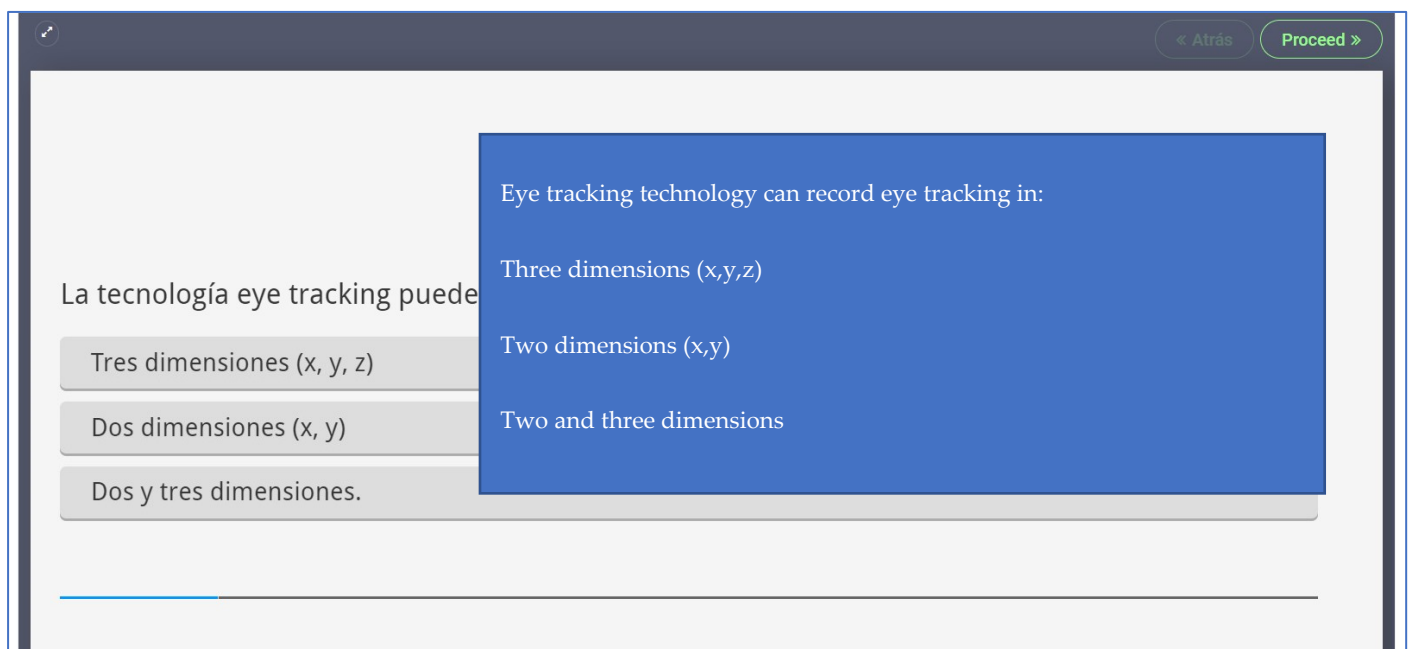
What for?

Scene 6



Note. This video can be found at: https://youtu.be/tiRnLYX-_18. While it is in Spanish, English subtitles are available.

Scene 7



Scene 8

La tecnología eye tracking puede registrar:

- Ambos ojos
- En el ojo izquierdo
- En el ojo derecho

Eye tracking technology can record eye tracking in:

- Both eyes
- In the left eye
- In the right eye

Navigation: « Atrás Proceed »

Scene 9

La tecnología eye tracking puede registrar:

- En una pantalla
- Todo tipo de superficies y contextos
- En una pizarra

Eye tracking technology can record eye movement in:

- A screen
- All types of surfaces
- On a whiteboard

Navigation: « Atrás Proceed »

Scene 10

« Atrás Proceed »

Un experimento con eye tracking se puede realizar:

- Con una barra de infrarrojos enfrente de la pantalla
- Con una pantalla
- Con unas gafas

An experiment with eye tracking can be carried out:

- With an infrared bar in front of a screen or with glasses that include the tracking device.
- With a screen
- With a pair of glasses

Progress bar: 50%

Scene 11

« Atrás Proceed »

La calibración se debe realizar:

- Durante el experimento
- Al final del experimento
- Antes de iniciar el experimento

Calibration must be carried out:

- During the experiment
- At the end of the experiment
- Before starting the experiment

Progress bar: 50%

Scene 12

« Atrás Proceed »

El diseño de una tarea para implementar eye tracking puede incluir:

- Videos y urls
- Imágenes y textos
- Imágenes, videos, texto, webs y/o urls

Designing a task to implement eye tracking can include:

- Videos and urls
- Images and text
- Images, videos, text, webs and/or urls

Scene 13

« Atrás Proceed »

En una tarea que se implemente en eye tracking, se debe hacer una distinción entre:

- Las áreas relevantes
- Las áreas relevantes y las áreas no relevantes
- Las áreas no relevantes

In a task that is implemented in eye tracking, a distinction must be made between:

- The relevant areas
- Relevant areas and non-relevant areas
- Non-relevant areas

Scene 14

