ANCIENT AGE – VEGA Teaching Scenario

Topic: Understanding Ancient Age – Egyptian Culture.

Subject(s): History

Age / Grade: 12+

Short description of the VR/AR games in this scenario:

MOZAIK 3D (AR/VR) The mozaik3D mobile application is a tool to explore more than 1200 educational 3D scenes and videos, interactive activities, games… with the help of a smartphone or tablet.

Interactive educational scenes that are related to history, technology, physics, mathematics, biology, chemistry, geography and visual arts make the learning experience an adventure. Most of our 3D scenes contain narration, built-in animations, as well as labels, fun animated activities, and other visual elements. Create a free user account and open 5 educational 3D scenes for free every week.

The 3D scenes are available in several languages, which also offers an excellent opportunity to learn and practice languages.

DISCOVR EGYPT (VR) Explore the Ancient Egyptian ruins to see what they might have to say about the life and culture of early civilizations. 1323 BC: a time when Egypt is a recognized world power. It's young leader, King Tutankhamun has passed away and buried in what would become one of the greatest icons of Ancient Egypt. The tomb is littered with treasures and artefacts symbolic of Ancient Egyptian culture. Centuries later the tomb is uncovered by British archaeologist Howard Carter, and now you too can explore the tomb. Look around and learn about its contents Discovry Mode, or take all the treasure before time runs out in Treasure Hunt.

COSPACEEDU(AR) CoSpaces Edu is a creation app widely used in schools around the world and lets kids easily create their own virtual content. Working simply as a website inside the browser but also as a mobile and tablet app, CoSpaces Edu enables students to build, code and explore their own creations in VR or AR, while demonstrating their learnings and developing essential digital skills.

Creating in CoSpaces Edu is a simple drag and drop process using a variety of creation features including 3D objects, building blocks, block-based coding and much more. CoSpaces Edu's visual coding language CoBlocks is ideal for young coders and a great introduction to computational thinking. Teachers are able to follow their students' work and even observe it in real-time online from their class in the "Students" section. Teachers automatically get access to their students' assignments as well as any CoSpaces created in Free Play.

Introduction to the scenario

The history stage is dedicated to the study of ancient civilisations. Taking the Egyptian civilisation as an example, a project to create a museum with VR will be developed. By means of an active and cooperative methodology, students will carry out tasks of research and synthesis of the information necessary for the subsequent creation of the museum.The aim is to work in depth on an ancient civilisation such as Egyptian civilisation and to learn more about it.

It is a traditional period, widely used in the periodisation of human history, defined by the appearance and development of the first civilisations that had writing, thus called "ancient civilisations". It has traditionally been the initial period of history proper, beginning with the invention of writing, preceded by prehistory. Some periodical schemes consider that there is a stage called "protohistory", between prehistory and the Ancient Age, defined by the appearance of the first civilisations without writing.

During the Ancient Age, hundreds of major civilisations emerged and developed on all continents, many of which generated products, institutions, knowledge and values that are still present today, from Sumer (4th millennium BC) and Ancient Egypt, through the ancient Vedic civilisations in India, ancient China, ancient Greece and Rome, the Achaemenid Empire in Persia, ancient South America, among many others.

The aim is to work in depth on an ancient civilisation such as the Egyptian civilisation and to learn more about it.

The students will get a possibility to gain a visual perception of how everything is working together and they will be able to stay motivated. This assignment can easily be adjusted to all students.

Learning outcomes:

The students are able to:

- Understand the way of life in ancient civilizations. Specifically Ancient Egypt
- Get to know Egypt society
- Get to know Egypt agriculture
- Get to know the Egypt culture

- Get to know the clothing
- Get to know the Mesopotamiam and Egypt religion
- Create an AR Museum about Ancient Egypt
- Search 3d Models in internet
- Work with EcoSpacesEdu and Augmentative Class to develop digital content

A selection of learning outcomes from the Spanish Curriculum

The ESO History curriculum is organised into different blocks.In this case, the contents belong to block 4: History.

- The first civilisations: Mesopotamia and Egypt.
- Notions related to historical time: chronological frameworks (millions of years, thousands of years, centuries), conventional ways of representing time, duration, simultaneous conventional ways of representing time, duration, simultaneity, change and succession

As for the evaluation criteria that adhere to these contents, they are as follows.

- Distinguish different time frames in Prehistory and Antiquity of the main processes of change by selecting the scale on the timeline used to represent them and showing the duration and simultaneity of the main processes of change.the scale on the timeline used to represent them and show the duration and simultaneity of these processes on one or more timelines.these processes on one or more historical timelines and maps.

This assessment criterion is related at a competence level to social and civic competences and to the competence of learning to learn.

With regard to the indicators of achievement related to the contents, they are:

- Distinguish different time frames in Prehistory and Antiquity related to the main processes of change (hominisation, formation of the first agrarian societies and ancient empires) when selecting the scale of the timeline (hundreds of thousands of years, thousands of years, centuries, etc.) used to represent them.

- Establishes chains of causes and consequences to explain the changes that led to the formation of early human societies of hunters and gatherers, agricultural societies, the emergence of religions,the creation of the first states and empires or the Greek and Roman expansions.

Students self-assessment rubric

This rubric is made to help understand what's important with games or any new media in general. An experienced teacher can run without, but this is to help new teachers to assess what's valuable.

The idea is that every ROW is just ONE variable (ex. recall, transfer. problem-solving etc.). You read the first column and give a 'grade'. The descriptions are just there to give a 'quality' if you need that.

Student evaluation rubric				
Knowledge content	1	2	3	4
Information recall	Student can't recall information covered in game	Student can recall some information covered in game	Student can recall most information covered in game	Student can recall all the information from the game well
Transfer	Student can't connect the information in game to information on books or in other medias	Student can transfer some information from the game to other medias	Student can transfer majority of information from the game to other medias	Student can connect the information in game very well to contents in other medias
Skills	1	2	3	4
Problem-solving	Student did not try to solve problems in game / during activity	Student was somewhat active in solving problems during the activity	Student worked rather actively on solving problems during class.	Student worked very actively on solving problems during class
Collaboration	Student was not able / willing to collaborate with others.	Student participated, but was not particularly active in collaboration.	Student was actively collaborating while working.	Student was very actively collaborating while working.

Creativity	Student did not actively consider / provide creative solutions to tasks or challenges	Student provided some creative ideas and solutions during the activity	Student actively considered / provided creative solutions to tasks or challenges	Student very actively considered/provided creative solutions to tasks or challenges
	1	2	3	4
Exercise completion	Student was not able to complete the tasks in the game	Student was able to complete some of the tasks in the game	Student was able to complete most of the tasks in the game	Student was able to complete all (or nearly all) tasks in the game
Engagement	Student was not engaged during the class	Student was slightly engaged during the class	Student was engaged during the class	Student was very engaged during the class

Formative assessment

The main part of the scenario (number of lessons):

Part one (two lessons - 45 min)

Lesson 1

Number of students: Duration (estimated time/number of lessons):

- 24 students (2 students/group)
- Two lessons: 2 working days x 45 min

Prerequisites (necessary materials and online resources):

At least 15 mobile or tablets (depending the number of students or groups

Install and download MOZAIK3D

Create free accounts for MOZAIK3D

- APP TRAILER
  https://www.youtube.com/watch?v=VoaWX6-WFcU

- HOW TO USE AND INSTALL MOZAIK3D
  https://www.youtube.com/watch?v=U93cA9V10kg

Before the program begins (preparatory work for teacher):

- Teacher will Introduce ancient civilisations in class. Dedicate a class to the introduction of the contents with audiovisual materials such as animation videos, documentaries, interactive games, etc.

  inside of ABU SIMBEL
  https://www.youtube.com/watch?v=UrsxgJE4UXo

  https://www.youtube.com/watch?v=xVf5kZA0HtQ

- Learn how basic functions work and how you use the controllers (make a manual for the controllers if the students haven't used them before)
- Create an assignment in Google classroom with project description and goals (the same task for three lessons)

  All material the students need is included in the assignment

- Divide students into groups of maximum two student / computer

Preparation

In class the students visualise the content of the following videos:

  https://www.youtube.com/watch?v=8_Tbv7anqXk

  https://www.youtube.com/watch?v=DovySvtHDgg

Using mobile and tablets with Cardboard, downloading MOZAIK3D, students are divided in teams to cover all topics. One device by each team:

MOZAIK30 group guide (cardboard) on this topics:

- EGYPTIAN PYRAMIDS
- ANCIENT EGYPTIAN GODS
- EGYPTIAN HOUSE OF ANCIENT AGE
- AGRICULTURE IN THE NILE VALLEY
- CLOTHING IN ANCIENT EGYPT
- THE TEMPLES OF ABU SIMBEL

Debrief with students in the end of the first lesson

- What did you learn that you didn't know before?

- Select a topic to develop in depth with your team: agriculture, wear, food, dayliving,...

- Search and collect information and material about the topic

- Prepare 1 infographic about a topic developed.

- How does the cooperation in your group work?

Lesson 2

Number of students: Duration (estimated time/number of lessons):

- 24 students (4 students/group)
- Two lessons: 2 working days x 45 min

Prerequisites (necessary materials and online resources):

- HTC DEVICE or OCULUS QUEST connected to computer
- STEAM ACCOUNT
- DISCOVR EGYPT VR game downloaded

Before the program begins (preparatory work for teacher):

https://www.youtube.com/watch?v=xVf5kZA0HtQ

- Learn how basic functions work and how you use the controllers (make a manual for the controllers if the students haven't used them before)

  HOW TO SETUP HTC VIVE
  https://www.youtube.com/watch?v=Wy94FrtlP-g
  HOW TO USE discoVR Egypt
  https://www.youtube.com/watch?v=So_1dioAsUM

- Create an assignment in Google classroom with project description and goals (the same task for three lessons)

  All material the students need is included in the assignment

- Divide students into groups of maximum 4 student / group

Preparation

Create different categories: agriculture, GODs, culture, devices, Clothes, Pyramids, social Status

BY GROUPS Students should explore Tomb and find all IMPORTANT KEY POINTS. They should create a GLOSSARY of terms that appear into DISCOVR.

Students should select one topic and they should prepare an Infographic and explain to other partners. (in the way that other students explore Tomb.

All students should vote to identify the best Infographic summary.

Explore the 3 rooms of King Tut's Ancient Egyptian tomb with the HTC Vive to see what they might have to say about the life and culture of early civilizations. 1323 BC: a time when Egypt is a recognized world power. Its young leader, King Tutankhamun, has passed away and been buried in what will become one of the greatest icons of Ancient Egypt. The tomb is littered with treasures and artefacts symbolic of Ancient Egyptian culture.

Centuries later the tomb was uncovered by British archaeologist Howard Carter, and now you too can explore the tomb.

Look around and learn about its contents in **Discovry Mode**, or take all the treasure before time runs out in **Treasure Hunt**.

CHECKLIST

SISTRUM		⊗
NECKREST		◯
COFFIN		◯
BOAT		◯ ◯
ANUBIS		⊗
NECKLACE		◯
JEWELS	◯	⊗ ◯ ◯ ◯ ◯ ◯ ◯ ◯

Lesson 3

Number of students: Duration (estimated time/number of lessons):

- 24 students (4 students/group)
- Two lessons: 2 working days x 45 min

Prerequisites (necessary materials and online resources):

- One computer per student group
- Free EcoSpacesEdu account
- Surfing Internet to find 3D Egyptian Models

Before the program begins (preparatory work for teacher):

- Teacher should undertand how EcoSpaceEdu works:
- HOW TO USE ECOSPACESEDU
  https://www.youtube.com/c/CoSpacesEdu
- TUTORIAL
  https://www.youtube.com/watch?v=KnP4iBlqs44
- DOWNLOADING MODELS FROM THINGIVERSE AND UPLOADING IN TINKERCAD
  https://www.youtube.com/watch?v=ChszmeRV72w

- Create an assignment in Google classroom with project description and goals (the same task for three lessons)

  All material the students need is included in the assignment

- Divide students into groups of maximum 4 student / group

Preparation

- Create an AR museum at school about Egyptcian culture. All students will participate selecting different topics and finding 360 and 3dModels.
- Put up panels with the infographics prepared by the students
- Create different categories: agriculture, GODs, culture, devices, Clothes, Pyramids, social Status
- Asign to each student one or several categories to find resources.
- Downloading 3D Models from Thingiverse, FreeCAD, TurboSquid repositories.
- Using EcoSpacesEdu and/or Augmentative Class cr eate marks
- Using EcoSpacesEdu to prepare MUSEUM

All schools can visit our AR Museum...

Lesson 4

Number of students: Duration (estimated time/number of lessons):
- 24 students (2 students/group)
- One lesson: 1 working day x 45 min

Preparations:

INTRODUCTION TO VRCHAT: https://www.youtube.com/watch?v=L-qtmSIH3nM

VISITING ANCIENT MUSEUM: https://www.youtube.com/watch?v=rXADNLLo6DY

Ancient museum visit

It's about visiting the Ancient Museum world in VRCHAT in OCULUS QUEST or DESK COMPUTER.

They must identify the largest number of ancient civilizations. After the visit, they will answer a short questionnaire of 10-12 questions about the exhibits in the museum.

Summative assessment:

Grades 5-10	5	6	7	8	9	10
Activity and engagement	The student has had challenges to get the task finished. The student hasn't shown signs of engagement neither at school nor at home.	The student has only occasionally shown interest in the work and has had difficulty finding motivation.	The student has mostly shown interest in the work both at home and at school.	The student has shown interest and commitment to the work both at home and at school.	The student has shown great interest and commitment both in lessons and at home.	The student has shown great interest, responsibility and commitment both in lessons and at home.
The overall picture of the work when completed.	The student misses several parts of his work and several points are not checked in the list.	The student lacks several parts of the checklist in his work.	The student lacks certain parts of the checklist, but it is largely complete.	The student has done all the parts on the checklist.	The student has done all the parts on the checklist and you can see that the student has made an effort to include all the parts.	The student has done every single part on the checklist and it can be seen that the student has processed the content.

| Content application | The infographic is presented with incomplete information. The structure is not clear, mixing concepts and ideas. Photographs do not describe or support the content. The oral presentation is brief and even incomplete. | The infographic is presented with complete information. The structure is diffuse but concepts and ideas are differentiated. Photographs provide little support for the content. The oral presentation is brief. | The infographic is presented with complete information. The structure is clear where concepts and ideas are differentiated and presented in a coherent order. Photographs support the content. The oral presentation is of good length and clarity. | The infographic is presented with the complete information and some references or additional data are added. The structure is clear where concepts and ideas are differentiated and presented in a coherent order. Photographs support and describe the content. The oral presentation is of good length and clarity. | The infographic is presented with the complete information and some references or additional data are added. The structure is clear where concepts and ideas are differentiated and presented in a coherent order. Photographs support and describe the content, forming a creative design. The oral presentation has a good length and clarity and is original. | The infographic is presented with the complete information and some references or additional data are added. The structure is clear where concepts and ideas are differentiated and presented in a coherent order. Photographs support and describe the content, forming a creative design. The oral presentation has a good length and clarity and is original. |

Images and captions	The student lacks pictures.	The student has few pictures and no captions.	The student has pictures but no captions.	The student has pictures with accompanying text.	The student has several pictures and descriptive captions.	The student has versatile pictures and descriptive and explanatory text.
Showing responsibility for the completion of the work. Cooperation and peer response	The student had difficulty cooperating with his group and did not listen to his classmates.The student did not give a peer response and did not take into account what the group gave in response.	The student had some difficulties in cooperating with his group and listening to his classmates. The student gave peer feedback without following the instructions. The student did not take into account the response given by the group.	The student mostly cooperated well with his group.The student received and gave feedback from his group almost always according to the instructions. The response was mostly constructive.	The student showed responsibility and mostly a good ability for cooperation.The student received and gave feedback from his group. The response was constructive.	The student showed evidence of good responsibility and a good ability for cooperation. The student gave a versatile response and took the response he / she received from his / her group into account.	The student showed evidence of excellent responsibility and an excellent ability for cooperation.The student made an effort to formulate himself in a constructive and valuable way for the task in order to help his group further in his work. The student received a response from his group and took it into account in his own work.

Skills	The student shows obvious shortcomings in the understanding of the subject.	The student shows some shortcomings in the understanding of the subject.	The student shows evidence of a certain understanding and some learned knowledge of the subject. .	The student shows evidence of a good understanding and has assimilated the most important content in the subject.	The student shows an excellent understanding and has assimilated the most important content in the subject but lacks some knowledge.	The student shows evidence of an excellent understanding and fully masters the content.
Language learning/English	The student has big difficulties in learning the English words.	The student struggles with and has some challenges with the English words.	The student knows the most important concepts and words in English.	The student shows evidence of understanding most parts In English.	The student has a good understanding and has learned most of the concepts and knows all the words in English.	The student masters all concepts and words in English.
Content application	The infographic is presented with incomplete information. The structure is not clear, mixing concepts and ideas.	The infographic is presented with complete information. The structure is diffuse but concepts and ideas are differentiated.	The infographic is presented with complete information. The structure is clear where concepts and ideas are differentiated and	The infographic is presented with the complete information and some references or additional data are added.	The infographic is presented with the complete information and some references or additional data are added.	The infographic is presented with incomplete information. The structure is not clear, mixing concepts and ideas.

	Photographs do not describe or support the content. The oral presentation is brief and even incomplete.	Photographs provide little support for the content. The oral presentation is brief.	presented in a coherent order. Photographs support the content. The oral presentation is of good length and clarity.	The structure is clear where concepts and ideas are differentiated and presented in a coherent order. Photographs support and describe the content. The oral presentation is of good length and clarity.	The structure is clear where concepts and ideas are differentiated and presented in a coherent order. Photographs support and describe the content, forming a creative design. The oral presentation has a good length and clarity and is original.	Photographs do not describe or support the content. The oral presentation is brief and even incomplete.
Exercise resolutions	They produce an incomplete infographic and presentation.	They produce a complete infographic and a short oral expression	They produce a full infographic and a good length and fairly comprehensive oral presentation	They produce a complete infographic, including additional information and an oral presentation with a good	They produce a complete infographic, including additional information and with a creative design.	They produce a complete infographic, including additional information and with a creative design.

				length and very complete content.	They deliver an oral presentation with a good length, very complete in terms of content and very original	
Skills	No attitude towards the activity. Distorts group activity.	Has a resolute attitude. Work on an individual basis. Does not show motivation in the activity.	Has a resolute and assertive attitude. Develops his/her role in the group. Work cooperatively.	Shows motivation in the activity. Has a resolute and assertive attitude. Develops his/her role in the group.	Shows motivation in the activity. Has a resolute and assertive attitude. Develops his/her role in the group. Works creatively.	Shows motivation in the activity. Has a resolute and assertive attitude. Develops his/her role in the group. Works creatively.