Visual arts: Insights in Global Art History and Perspective drawing

– VEGA Teaching Scenario

Topic: Gaining knowledge on visual arts and specifically on global art history through "jumping" in and out of various famous paintings dated from Renaissance onwards, as well as on perspective drawing through virtually immersing in a drawing room to create 3D shapes.

Subject(s): Visual Arts: Global Art History (Renaissance to 21st century) and Perspective Drawing

Age / Grade: 16-18 years old (2nd and 3rd class of high school)

Short description of the VR game:

1) [**"Do Not Touch!" on Within**]:

   The Within application has been created to share immersive experiences that activate people's imaginations and is available for VR headsets and mobile devices (also using Google Cardboards). As part of this, various short clips are featured, focusing on different thematics, such as music, animation, travelling explorations, art etc. An example of such a clip is "Do Not Touch!", where Eric, the protagonist, gets sucked into a painting he touches and engages into a chase with the museum guards, as the viewers experience a variety of art pieces.
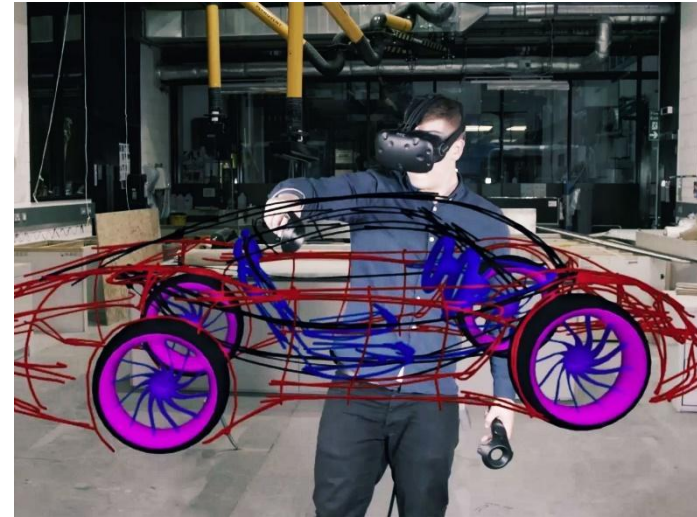
   (Clip duration: 3:01')

(Source: https://play.google.com/store/apps/details?id=com.shakingearthdigital.vrsecardboard)

2) Gravity Sketch:

Gravity Sketch is a 3D design platform that allows designing a range of ideas, from freehand drawing sketches to elaborate 3D models and perspective drawings. This is a stand-alone application which can also be used in conjunction with the Gravity Sketch VR app.

(Sources: 1) https://i0.wp.com/www.oqplay.com/wp-content/uploads/2019/07/Gravity-Sketch-Promo.jpg?fit=1440%2C810&ssl=1

2) https://media.wired.com/photos/5926b6cbf3e2356fd800a34e/master/w_2560%2Cc_limit/GravitySketch_TA.jpg)

Introduction to the scenario:

In the scenario students will get, on the one hand, an overview of the most important art periods and movements from Renaissance to the 20th century, through diving into various paintings in a forbidden mission, while on the other one, experience the hands-on designing of objects from 2D to 3D and vice-versa.

Learning outcomes:

The students are able to:

- Place an art movement/period in a historical timeline and recognition of its characteristics and main representatives;
- Historically analyse an art work;
- Be aware of the importance of the political and socioeconomic background for the creation and development of Art;
- Evaluate and compare works from different eras, as well as identification of similarities and differences;
- Analyse the content of an art work and description of its historical and structural characteristics by using the correct terminology;
- Recognize depth in a space and the role of perspective when drawing it.
- Discern the different elements of perspective drawing
- Use the drawing instruments
- Comprehend and apply the design symbols and scales
- Detect the basic principles of orthographic, isometric and side projections and be capable to apply them to their designs
- Recognize the basic principles of perspective drawing and apply them to their designs, both through geometrical tools, as well as freely
- Understand a three-dimensional space and apply it to their designs.

A selection of learning outcomes from the Cypriot Curriculum:

- Acquaintance with and comprehension of Visual Arts through the History of Art, as well as through balanced, experiential research and works creation activities;
- Conduction of research and material collection relevant to the respective art thematic;
- Interaction with environmental stimuli and drawing of ideas from them;
- Recognition and utilisation of the principles of composition;

- Expression of different ideas and interpretations relating to each respective art thematic (ex. historical, political and social background; ways to utilise the research etc);
- Placement of an art movement/period in a historical timeline and recognition of its characteristics and main representatives;
- Historical analysis of an art work;
- Cultivation of visual expression and visual thinking, as well as connection with themselves and the environment;
- Recognition of Perspective Drawing as a system for visualisation of three-dimensional space with application on subjects such as Architecture, Space decoration etc;
- Capacity to create geometrical shapes, volumes and landscapes with an architectural subject;
- Development of skills to apply learned theory into praxis;
- Development of critical thinking and adaptation skills;
- Development of skills in utilising materials, techniques, means and resources;
- Cultivation of student as a critically thinking individual, conscious viewer/ creation who is familiar with the artistic terminology and actively engaged in social life through Art.

Formative assessment

Number of students: 15-20 (3 students per group)

Duration: 8 lessons of 40-45 min each

Prerequisites:

1. Smart phones with internet connection to the Within app or having downloaded the video clip "Do Not Touch! on"
2. Cardboard VR.
3. VR glasses with the VR application "Gravity Sketch".
4. Account creation on Landing Pad.
5. Check that the internet is working.
6. Gather information to introduce the students to the topic and accompanying materials (videos, pictures, etc.):
   - Characteristics of various art periods and movements presented from Renaissance to the 20th century (ex. Baroque, Impressionism, Cubism, Expressionism, Pop Art etc.)
   - Key figures representing art periods and movements from Renaissance to the 20th century
   - Projections in perspective drawing (orthographic, axonometric, isometric)
7. Exercise sheet on the "Do not touch!" video and on Projections.
8. Computer and projector.
9. Markers and whiteboard.

Before the program begins (preparatory work for teacher):

- Watch the video clip "Do Not Touch" on Within app through VR CardBoard and read up on the different art periods and movements presented from Renaissance to the 20th century (ex. Baroque, Impressionism, Cubism, Expressionism, Pop Art etc.)

   Suggested reading material:

   https://sites.google.com/site/completearthistory/art-progress-from-the-renaissance-through-the-20th-century

- After having identified the majority of paintings in the "Do not touch!" video, create an sheet with the images of the paintings and information on the name of each painting, the name of the artist and the relevant art/historical era. As an exercise, the students can match the image of the painting with the corresponding information.

- Select from the Triviaplaza which art quizzes you would like to complete with the students in class:

   https://www.triviaplaza.com/miscellaneous-art-quizzes/

- Familiarise yourself with the "Gravity Sketch" app and learn how to operate the controllers;

   Watch the VR trailer: https://www.youtube.com/watch?v=0aoUlwZxzow

   Watch the video:

   https://www.youtube.com/watch?v=FPA1YZl4m0I&list=PLdcetkoP2x8Q8U71Zm92zhUJLYV0k3nbH&index=14

- Create your account on the landing pad to save your creations: https://landingpad.me/

- Ensure that the VR glasses and remote controls are fully charged;

- Create the exercise sheet on the "Do not touch!" video and print out a sufficient number of copies of both exercise sheets to hand out to the students;

- Divide the students into working groups (with equipment; up to 3) and discussion groups (up to 5 persons);

The main part of the scenario:

Part one (3 lessons of 40-45 minutes):

Lessons 1-3:

Preparations:

- Watch the video clip "Do Not Touch" on Within app through VR CardBoard and read up on the different art periods and movements presented from Renaissance to the 20th century (ex. Baroque, Impressionism, Cubism, Expressionism, Pop Art etc.)

    Suggested reading material:

    https://sites.google.com/site/completearthistory/art-progress-from-the-renaissance-through-the-20th-century

- After having identified the majority of paintings in the "Do not touch!" video, create a sheet with the images of the paintings and information on the name of each painting, the name of the artist and the relevant art/historical era. As an exercise, the students can match the image of the painting with the corresponding information.
- Bring markers for the wordcloud.
- Select from the Triviaplaza which art quizzes you would like to complete with the students in class:

    https://www.triviaplaza.com/miscellaneous-art-quizzes/

Learning sessions:

- The educator asks the students to view individually the video clip ""Do Not Touch" on Within app through VR CardBoard. After the first screening, the educator inquires about the students' initial impressions for about 5 minutes.

- Then, the educator instructs the students to sit in working groups of 3. While one person rewatches the video clip and observes the shown paintings, the others are responsible to make notes of:

   1) The painter's name;

   2) The painting's name;

   3) The relevant art period (Era name and century/decade).

   The students can take turns while rewatching the video until they have identified at least 5 art pieces. The working group that accomplishes this first is the winner of this small challenge.

- Afterwards, the educator distributes the exercise sheet for students to match the paintings with the with the corresponding information.

- Following this, the educator asks the students what they know about the famous paintings and art periods shown in the video clip. A 30 minute discussion is held on this and the educator keeps notes in the format of a wordcloud (offline).

Questions that the educator can ask to the students:

1. Which paintings were you able to identify in the video?
2. Which are the main characteristics of the art eras identified in the video?
3. What historical, social and political events influenced art during these periods?
4. Are you familiar with other works of art (not paintings) from these art eras?

- To consolidate the acquired knowledge, the teacher can present the students with a couple of quizzes on various art periods and movements from the Renaissance to the 20th century through the Triviaplaza website. The student who finds the most correct answers could win a small prize.
- As an exercise for the next session, the students have to take inspiration from one of the paintings in the video and use its methodology to create a painting of their own with contemporary importance. For the subject they can draw inspiration from their school environment, current socio political or historical events. The work will be presented at the end of the session.

Debriefing:

- How is the assignment and cooperation going?
- Does everyone understand the assignment and know what to do?
- How did you feel when experiencing the "Do not touch!" video?
- What comes to mind now when you think about the history of art?
- Did all students have the opportunity to experience the video and take part in the activities?

Part two (5 lessons of 40-45 minutes):

Lessons 4-8:

Preparation:

- Before the class, ask the students to register to the Landing Pad, in order for their designs to be saved.

- Bring the VR glasses and check that they are charged.

- Cast the VR Glasses to a computer and the projector in case there are not enough VR glasses for all groups.

- Familiarise yourself with the "Gravity Sketch" app and learn how to operate the controllers;
  Watch the VR trailer: https://www.youtube.com/watch?v=0aoUlwZxzow
  Watch the video:
  https://www.youtube.com/watch?v=FPA1YZl4m0I&list=PLdcetkoP2x8Q8U71Zm92zhUJLYV0k3nbH&index=14

- Have the trailer of Gravity Sketch app available for screening.

- Print out a sufficient number of copies of the exercise sheet on Projections to hand out to the students.

Learning sessions:

- The educator introduces the students to the different dimensions and symbols used in Perspective Drawing, as well as the variety of scales. For a better consolidation of the gained knowledge, before the end of this class the students can complete the exercises in the respective school book.

- During the following two lessons, the educator delivers the theory on three types of projections used in Perspective Drawing, namely the orthographic, the axonometric and the isometric projections (ex. what each one is, what purpose they serve etc.).

- To practise on the hands-on applications of these projections, the students will be using the Gravity Sketch VR application. As a first step, the educator can present the trailer of the app and confirm that all students have registered to the Landing Pad. Then, the educator can show the video on how to use the VR controllers in the Gravity Sketch app.
- Then, working in groups of 3, the students will have to carry out the Exercise Sheet on Projections, by working in turns with the VR headsets and analog material. To allow for enhanced immersion during the VR app usage, he third person in the group can be helping the student using Gravity Sketch with giving the dimensions.
- After each team has at least 2 copies of each exercise in digital and analog format, the students send their digital designs to the teacher through the Landing Pad and hand in the exercise sheets for evaluation.
- The lesson concludes with the debriefing questions.

Debriefing:

- How did you find the Gravity Sketch VR app? What did you like the most and what did you like the least?
- Was the VR app easy to navigate or did you face any problems?
- How did you find the collaboration between your group?
- Can you mention one lesson that you have learnt through this experience?
- Is there something that you would change from these sessions?
- Do you observe any change in your initial understanding of orthographic, axonometric and isometric projections?