

Europeana Learning Scenario

Title

Learning from the past: The transition from the myth to the logics.

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Abstract

The aim of this learning scenario is to investigate the relationship between Mathematics and Philosophy, looking for the main mathematicians who were also philosophers since the ancient Greek history to nowadays. The students have to find information from the Europeana.eu platform, create digital presentations or infographics using Canvas and share it in a Padlet created by the teachers. Also, after that, we should distribute the class in groups of five in order to practice the World Café methodology.

Keywords

Philosophy, Mathematics, History, Communication, Logics, Science.

Table of summary

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Subject	Philosophy and Mathematics.
Topic	Pre-Socratics and the transition from the myth to the logics and its relationship with some mathematical concepts through the logics.
Age of students	15 and 16 years.
Preparation time	3 hours
Teaching time	8-9 lessons
Online teaching material	Padlet (web where we can create boards to present digital content), Youtube, Wikipedia, Canvas (website to create infographics, digital posters and presentations), Jclit (a website where you can find mathematical exercises to do online), online encyclopedias, etc.
Offline teaching material	
Europeana resources used	The experimental method in the seventeenth century Bertrand Russell School of Athens Euclid and Ptolomeo

[Nicolas Copernicus](#)
[Descartes](#)
[Bertrand Russell](#)

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Integration into the curriculum

These lessons plans are integrated at the curriculum of Philosophia and Mathematics.

Aim of the lesson

To be aware of the importance of the use of logics and the rational thinking in the developing of our human knowledge through the history.

Trends

STEAM learning, Collaborative learning, visual search and multimedia materials, peer learning, open source learning, cloud based learning.

21st century skills

Critical thinking, creativity, communication and cultural awareness.

Activities

Name of activity	Procedure	Time
Introduction to the topic	<p>To start, we will watch these videos to explain and introduce the context of the presocratics, Plato and Aristotle and their contribution to the science as a mathematicians and philosophers.</p> <p>The pre-Socratics (Philosophy class) Plato and Aristotle (Philosophy class) Zeno's paradox (Mathematics class) Donald in Mathmagic Land (Mathematics class)</p> <p>After that, we will explain this period of the History of Philosophy using different resources. Some of them:</p> <p>Stanford encyclopedia Podcasts (King's college London)</p>	1-2 lessons

Name of activity	Procedure	Time
<p>Documentaries: - Genius of ancient world. Socrates. - Cosmos. Carl Sagan. Chapter VII. <i>'The backbone of night'</i>.</p>		
Investigation	<p>Students will have to do the activity <i>Who is who: 'The school of Athens'</i> They will search more information about the figures who appear at the Raphael's masterpiece using online resources: The story behind Raphael's Masterpiece 'The school Of Athens' (Philosophy class)</p> <p>Mathematics class: Students will have to solve different kinds of exercises and problems related with the Greek philosophers and mathematicians: Mathematics activities</p> <p>Finally, we will study in a general way, the contribution of modern philosophers and mathematicians as Descartes and Bertrand Russell.</p> <ul style="list-style-type: none"> - The experimental method in the seventeenth century. (Europeana.eu) - Bertrand Russell. Resource obtained from Europeana.eu and Wikipedia commons. 	1 lesson
Digital presentations	<p>To create digital presentations or/and infographics with Canvas. 1-2 lessons</p> <p>Resources of Europeana.eu: School of Athens Euclid and Ptolomeo Nicolas Copernicus Descartes Bertrand Russell</p>	
Padlet	<p>Sharing the digital presentations of the investigation of each students group at the digital platform. What is Padlet?</p>	1 lesson
World Café	<p>To distribute the class in groups of 4 or 5 students. In these groups each student will have a role play. There will be two mathematicians and two</p>	

Name of activity	Procedure	Time
	<p>Philosophers who will have to argue and dialogue about their theories.</p> <p>Previously to the debate, we will have studied the Socratic dialectical method with documentaries (<i>Genius of the ancient world. Socrates</i>) and Information from the textbook.</p> <p>What is a World Café session?</p>	2 lessons

Assessment

- Final test with answers multiple choice.
- Rubric to evaluate a digital presentation.
- Peer assessment to evaluate the debate between students in cooperative groups using a rubric.
- Rubric to evaluate teaching.

***** AFTER IMPLEMENTATION *****

Student feedback

Add here the method with which your students will be able to give you feedback and discuss the lesson.

Teacher's remarks

*Add here your comments and evaluation **AFTER** the implementation of this lesson. You can always use a rubric for self-assessment.*

About the Europeana DSI-4 project

[Europeana](#) is Europe's digital platform for cultural heritage, providing free online access to over 53 million digitised items drawn from Europe's museums, archives, libraries and galleries. The Europeana DSI-4 project continues the work of the previous three Europeana Digital Service Infrastructures (DSIs). It is the fourth iteration with a proven record of accomplishment in creating access, interoperability, visibility and use of European cultural heritage in the five target markets outlined: European Citizens, Education, Research, Creative Industries and Cultural Heritage Institutions.

[European Schoolnet](#) (EUN) is the network of 34 European Ministries of Education, based in Brussels. As a not-for-profit organisation, EUN aims to bring innovation in teaching and learning to its key stakeholders: Ministries of Education, schools, teachers, researchers, and industry partners. European Schoolnet's task in the Europeana DSI-4 project is to continue and expand the Europeana Education Community.

