THEME 5 - WP15

Increasing awareness on scientific and social relevance of ERIs: a serious gaming approach

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4th ENVRI week
May 15th - 19th, 2017 – Grenoble
The ENVRIplus scientific gaming

TARGET => Secondary school students, teachers and school communities

WHAT => Challenging school students to learn more about science, the scientific method, the activity and social impact of ERIs through innovative pedagogical approach

HOW => Actively involving students in science, addressing scientific problems, designing and running experiments, drawing results and ...gaming

APPROACH => Learning by doing, situated learning, ICT, motivational incentive, peer review

STRUCTURE => 1. ‘Carry out a research project’
                2. The online competition

APPLICATION => events, tournaments, demo ....
The Scientific Game components

THE PROJECT

NULL HYPOTHESIS

The Leonardo’s man is only a model for art

THE ONLINE GAME

HI Admin!

You have decided to have an experience as a researcher!

You are interested in Ecology, Ecosystems and Biodiversity.

Congratulations!

ENVRIplus is recruiting for its Research Groups. So our research interests fit with yours.

You could be employed as a researcher by our University if you can demonstrate how to use scientific method to explore biodiversity.

START

4th ENVRI week

May 15th-19th, 2017 – Grenoble
The Scientific Game Platform

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The **Scientific Game Platform**

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**4th ENVRI week**  
*May 15th -19th, 2017 – Grenoble*
The Scientific Game Mini-Pilot

A prototype of the Scientific Game

**PLANNED** Mini Pilot (2016-2017)
Italian schools running the prototype

**REALIZED** Mini-Pilot (2016-2017)
⇒ 12 Senior and Junior Schools and 4 Countries registered on the platform
⇒ 6 Senior and Junior Schools and 2 Countries run the Mini-Pilot of the game

4th ENVRI week
May 15th -19th, 2017 – Grenoble
The **Mini-Pilot** projects

WE ARE LIKE "UOMO VITRUVIANO!"

Leonardo's scientist – F.G. Leonardo da Vinci – Cavallino – Lecce – Italy

1 - Introduction
The Leonardo’s man

In the 15th century Leonardo da Vinci drew "Uomo Vitruviano". In this drawing Leonardo wrote what should be the proportions between the different parts of the body so that we get a perfect man. We can read: "L'altezza totale coincide con la distanza che, a braccia aperte, appena la punta di ciascun dito medio (fig. 4). In questo modo, l'uomo che assume questa posizione, è inseribile in un quadrato." So Leonardo claimed that the ratios between the height and the opening of the arms should be equal to 1.

**Biodiversity in our garden**

A project realized by "The snow leopard"

**4th ENVRI week**

**May 15th -19th**, 2017 – Grenoble

**Butterflies and their habitat**

Secondary School Lefkimmis
Butterflies’ Team
The **Mini-Pilot** evaluation system

**The Project**

Project evaluation criteria

⇒ Problem definition (*up to 4 points*)

⇒ Hypothesis formulation and coherence with the scientific method (*up to 4*)

⇒ Clarity of the presentation (*up to 8*)

⇒ Results’ presentation and conclusions (*up to 6*)

⇒ Communication skills, (*up to 8*)

**The Online Game**

Game evaluation criteria mistakes & time

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*4th ENVRI week*

*May 15th -19th, 2017 - Grenoble*
The **Mini-Pilot** evaluation by players

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think that the initial presentation of the game is sufficiently clear?</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Did you like the graphic interface of the game?</td>
<td>98%</td>
<td>2%</td>
</tr>
<tr>
<td>Did you fount the game is entertaining?</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Did you found term, which you do not know the meaning?</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Did you have difficulties in playing the game?</td>
<td>78%</td>
<td>22%</td>
</tr>
<tr>
<td>Did you like the images of the game?</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Did the platform provide useful content, information and glossary?</td>
<td>75%</td>
<td>25%</td>
</tr>
<tr>
<td>Did the interactive parts of the game works properly?</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>Do you think that the information of the game’s Phases on the platform are described properly?</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>Was the game able to teach you the scientific method?</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td>Do you think that learning the scientific method was entertaining?</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Did you played the game before the final online competition?</td>
<td>81%</td>
<td>19%</td>
</tr>
<tr>
<td>Would you like to repeat this experience next year?</td>
<td>100%</td>
<td>0%</td>
</tr>
</tbody>
</table>
The **Mini-Pilot WINNERS**

**THE JUNIOR TEAM**

**THE JUNIOR & SENIOR TEAMS**

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The ENVRIplus 2017-2018 Scientific Game

⇒ Three **Domains** involved: Biosphere, Marine, Solid Earth;
⇒ User-friendly tool for game implementation to enlarge **Domain** & **ERI** participation
⇒ **EMSO**, **EPOS**, Euro-Argo, GROOM, LifeWatch already involved, **ANAEE**, **EGI**, **SIOS** & others in the process to decide involvement