



MINISTRY OF EDUCATION AND SPORT

REPUBLIC OF SLOVENIA



Professional Development Workshop

Natural Sciences & eTwinning

Venue: Ptuj, Gimnazija Ptuj, Slovenia

24th to 26th September 2010

Programme

Friday, 24th September

- | | |
|---------------|---|
| 15:45 | Meeting at hotel lobby, departure to PDW venue |
| 16:00 – 17:00 | Registration |
| 17:00 – 18:30 | Setting up of the presentation stands |
| 18:30 – 19:00 | Opening addresses <ul style="list-style-type: none">• Maja Mihelič Debeljak, director of CMEPIUS• Štefan Čelan, PhD, Mayor of Ptuj Municipality• Melani Centrih, Headmaster of Gimnazija Ptuj |
| 19:00 – 20:00 | European fair - informal networking
Presentation of projects and country specific food and drink
Buffet dinner |
| 20:00 – 21:00 | Insight into Slovenian culture |

Saturday, 25th September

8:35 Meeting at hotel lobby, departure to PDW venue

8:50 – 10:20 Plenary session

- Borut Čampelj, Ministry of Education and Sport
- Maja Abramič, eTwinning Coordinator, CMEPIUS
- Christina Crawley, European Schoolnet, eTwinning CSS
- *The future of computer and information technologies in the coming decades*, Saša Divjak, PhD, University of Ljubljana, Faculty of computer and information science

10:20 – 10:45 Coffee break

10:45 – 11:15 *E-competent schools*, Nives Kreuh, The National Educational Institute

11:15 – 11:45 *Value added class work with on-line projects* (presentation of good practices), Breda Poličar, Lorena Mihelač in Tatjana Gulič, E-school project

11:45 – 12:30 Lunch and networking

12:30 – 14:00 **Parallel workshops I**

A: Intercultural communication & eTwinning, James Chamberlain,
Bonn-Rhein-Sieg University, Room 10

B: European peer learning! The role of social games in relation-building process among pupils, Romina Plešec, Vrhovci primary school, Room 12

C: Discovering eTwinning portal, Christina Crawley, European Schoolnet,
eTwinning CSS, Room 9

D: "Spicy" Physics, Sergej Faletič, Faculty of Mathematics and Physics,
(University of Ljubljana), Room15

E: "Naughty" Astronomy, Andrej Lajovic, Gymnasium Šentvid, Room 8

F: Interactive whiteboard & Natural science subjects, Urška Bučar,

Tomaž Miholič, Amela Sambolič-Beganović, Viljenka Šavli, E-school project, Room 18

14:00 – 14:30 Coffee break and networking

14:30 – 16:00 **Parallel workshops II**

*A: Intercultural communication & eTwinning, James Chamberlain,
Bonn-Rhein-Sieg University, Room 10*

*B: European peer learning! The role of social games in relation-building
process among pupils, Romina Plešec, Vrhovci primary school, Room 12*

*C: Discovering eTwinning portal, Christina Crawley, European Schoolnet,
eTwinning CSS, Room 9*

*D: "Spicy" Physics, Sergej Faletič, Faculty of Mathematics and Physics,
(University of Ljubljana), Room15*

E: "Naughty" Astronomy, Andrej Lajovic, Gymnasium Šentvid, Room 8

F: Interactive whiteboard & Natural science subjects, Urška Bučar,

Tomaž Miholič, Amela Sambolič-Beganović, Viljenka Šavli, E-school project, Room 18

16:30 – 21:00 Sightseeing

(The oldest Slovenian wine cellar and the city of Ptuj) & Dinner at Ribič Restaurant

Sunday, 26th September

09:45 Meeting at hotel lobby, departure to PDW venue

10:15 – 11:45 **Parallel workshops III**

A: Intercultural communication & eTwinning, James Chamberlain, Bonn-Rhein-Sieg University, Room 10

C: Discovering eTwinning portal, Christina Crawley, European Schoolnet, eTwinning CSS, Room 9

D: "Spicy" Physics, Aleš Mohorič, Faculty of Mathematics and Physics, (University of Ljubljana), Room 15

E: "Naughty" Astronomy, Andrej Lajovic, Gymnasium Šentvid, Room 8

F: Interactive whiteboard & Natural science subjects, Urška Bučar, Tomaž Miholič, Amela Sambolič-Beganović, Viljenka Šavli, E-school project, Room 18

11:45 – 12:00 Wrapping up the PDW

12:00 – 13:00 Lunch

13:00 Departure

Workshops summaries

A: Intercultural Understanding - for teachers and pupils (Room 10)

James Chamberlain, Bonn-Rhein-Sieg University

The aim of this interactive workshop is to explore culture and the role it plays in our communication across cultural boundaries. We will look at culture as a phenomenon worthy of study, as something we do (and in which we are more or less competent), and as a psychological process. Throughout the workshop we will apply the insights we gain, the techniques we practice and the materials we use to classroom situations and, in particular, to eTwinning partnerships.

B: European peer learning! The role of social games in relation-building process among pupils (Room 12)

Romina Plešec, Vrhovci primary school

The workshop will focus on getting to know each other and cooperating. By employing social games, we will learn about ourselves and others. Moreover, we will reflect on different group roles, establishing appropriate communication and forming collaborative relations among pupils.

The workshop will be organized as a series of short activities; some carried out individually, others in pairs or groups. Each activity will be followed by an evaluation of its applicability in the classroom or in a group of pupils involved in a project.

One of the most important aims of the workshop is to transfer the above mentioned activities into the virtual environment of international projects.

C: Discovering eTwinning portal (Room 9)

Christina Crawley, European Schoolnet, eTwinning CSS

Join the workshop and explore all the tools and possibilities that eTwinning portal offers to you!

D: "Spicy" Physics (Room 15)

Aleš Mohorič and Sergej Faletič, Faculty of Mathematics and Physics (University of Ljubljana)

"How can we make teaching of physics more interesting and gain a greater knowledge transfer? Besides the main ingredients – teachers' knowledge and enthusiasm - we can spice it up with a proper use of modern information and communication technologies. In the workshop we take a quick look at Slovenian e-learning portal www.nauk.si and explore some of its unique features. In the next step the use of personal respond system is introduced followed by a short demonstration of its use in the class. This tool is helpful in implementing some active learning techniques and combined with peer-instruction increases the knowledge transfer and resonates positively with students. Finally, the use of electronic sensor and computer interface enables execution of experiments and their analysis with real-time on-screen demonstration."

E: "Naughty" Astronomy (Room 8)

Andrej Lajovic, Gymnasium Šentvid

HDR in Astronomy

High dynamic range imaging (HDR) is a set of techniques that allows a greater range of luminances between the lightest and darkest areas of an image than standard photographic methods.

The two main sources of HDR imagery are computer renderings and merging of multiple photographs, the latter of which in turn are individually referred to as low dynamic range photographs. Creating a HDR image consists of two steps. The first is merging multiple images into one image, which holds more information than images we can display on screen or print.

The second step is converting (tonemapping) this image back into an ordinary image while retaining the wider range of luminances as well as fine details.

HDR could prove very interesting for astrophotographers for those objects and events, such as nebulae, eclipses, atmospheric phenomena, etc., which have too large of a dynamic range to be captured in a single image. A number of image stacking applications use HDR, and are free!

F: Interactive whiteboard & Natural science subjects (Room 18)

Urška Bučar, Tomaž Miholič, Amela Sambolič-Beganović, Viljenka Šavli, E-school project

Interactive white board (IWB) can be a useful tool in the contemporary e-learning process. The authors of the workshop will try to prove that the above statement is true by presenting interesting solutions of using IWB in the classroom, concerning project work in science and by involving participants in activities.

A wide variety of possibilities that are supported by this new tool will be presented such as creating multilingual i-transparencies, offering rich visual support of images, sound and other multimedia resources, enabling dynamic interaction between a student and a teacher, checking class atmosphere or knowledge by using its responding system and presenting snapshots of i-transparencies in an e-learning environment.

We believe that our workshop arranged into three parts with common content but different didactic approach will help participants to find ideas and useful solutions for using IWB in future international eTwinning projects.