# FRIDAY 18. 09. 2015

#### 15:00 - 17:30 Conference Registration

Conference delegates arriving and registering can familiarise themselves with the environment.

#### 17:30 - 19:30 Plenary Session 1

### **Conference Welcome**

Sotirios Glavas, President, Greek Institute of Educational Policy, Greece

Nelly Arvaniti, School Counsellor for Physical Education in Eastern Attica, Greece

António M. Teixeira, EDEN President

#### **Keynote Speeches:**

# Smart Educational Decision Support Systems for School Complexity Leadership: A Research Agenda for School Analytics

Demetrios G Sampson, Senior and Golden Core Member IEEE, Professor of Digital Systems in Learning and Education, Dept of Digital Systems, University of Piraeus, Adjunct Research Fellow, Information Technologies Institute, Center for Research and Technology, Editor-in-Chief, Educational Technology & Society Journal, Greece

### **Enhancing Teachers' Digital Skills**

John Garofalakis, Computer Technology Institute and Press "Diophantus", Greece

### Open Educational Resources for Environmental Education

Franz Bogner, Lehrstuhl Didaktik der Biologie, Universität Bayreuth, Germany

### **Developing Effective Teachers Communities**

Rosa Doran, NUCLIO / GHOU / Portuguese Astronomical Society, Portugal

# 19:30 - 20:30 Welcome Reception

Venue: Ellinogermaniki Agogi (Conference venue)

# **SATURDAY** 19. 09. 2015

# 09:00 - 11:00 Plenary Session 2: Lessons Learnt from Large Scale Innovation Initiatives implemented in European School

### Motions in Physics and Mathematical Function in a Web Inquiry Based Learning Environment

Panagiota Argyri, Model Experimental High School of Smyrna, Greece

### Implementing Innovative Learning Methods: A Two Schools Example

Maria Argyropoulou, 4th General High School of Patras, Ioannis Chiotelis, Model Experimental High School of University of Patras, Maria Theodoropoulou, George Birbas, General High School of Pelopio, Greece

### Science Teaching in Secondary Special Education

Nikolaos Nerantzis, Special Vocational High School of Serres, Katerina Riviou, Ellinogermaniki Agogi, Greece

Tablets and Special Education – A Case Study in Greece Early Results of the 1st Year Argeroula Petrou, Special High School of Athens, Greece

Rural Education & Open Discovery Space: the Case of the Greek Island of Thymaina Stefanos Poultsakis, Primary School of Island of Thymaina in Eastern Aegean, Greece

# Teaching PE through Mathematics, Physics & Web 2.0 Tools in Secondary Education: Impact & Challenges

Katsanis Georgios, Model-Experimental Senior High School of the University of Macedonia, Greece

### Landing on a comet! The Rosetta project

Maria Eleftheriou, Lyceum of Tzermiadon, Crete, Greece

11:00 - 11:30 Coffee Break

11:30 - 13:00 Parallel Sessions A

### Session A1 Innovative Teachers as Change Agents: their Stories (DigiSkills)

# Nanotechnology through Lesson Plans in 7<sup>th</sup> Grade of Primary School in Croatia Marina Molnar, Primary School Stobrec, Croatia

### Safer Internet Project

Jasminka Lisac, Branka Mihajlovic, Srednja Skola Delnice, Croatia

# An Introduction to the Geometry of Fractals in Primary and Secondary Education

Konstantinidis Ioannis, School of Pedagogical and Technological Education of Athens, Greece

# The Computational Experiment Using the Easy Java Simulation Community and the Inquiry Based Learning and Teaching Approach

Sarantos Psycharis, Kyriakos Syrmakezis, School of Pedagogical and Technological Education, Greece

# Developing a Spacewalk Simulation with the Easy Java Simulations Tool and Implementing a Lesson Plan Using the Inspiring Science Education Authoring Tool

Anna Malamou, Mina Sarli, Sarantos Psycharis, School of Pedagogical and Technological Education, Greece

### Session A2 Innovative Teachers as Change Agents: their Stories (GreeNET)

# Environmental Education through Enquiry and Technology: The Case of the GreeNET Poject

Vassilis Protonotarios, Agro-Know Technologies, Giannis Stoitsis, Nikolaos Marianos, Giorgos Papoutsis, Greek Research and Technology Network - GRNET, Greece

# **GreeNET: Supporting Green Careers through Effective Educational Initiatives**Mona Schoenfelder, Franz Bogner, University of Bayreuth, Germany

#### Evaluation of Activities in the Network "GreeNET"

Michaela Marterer, Peter Haertel, Styrian Association for Education and Economics, Austria

# School Gardens: Promoting Actions for Building Innovative Learning Communities of Practice

Nektarios Tsagliotis, 9th Primary School of Rethymnon, University of Crete Greece

Innovative school activities toward identifying, developing and promoting local products Stamatis Papadakis, Krousonas High School, Greece

13:00 - 14:00 Lunch Break

14:00 - 16:00 Training Session 1

# Responsible Use and Cybersafe Behavior. The Role of Teachers at Protecting Children from Inappropriate Content

Aris Louvris, Web administrator and responsible for the informative site of Greek School Network "Internet Safety". National Coordinator for eSafety Label, Member of GR SIC Advisory Board; Katerina Papakonstantinou, Project Manager in GRNET, responsible for the eParents Academy of the ODS Project; Marina Molnar, Primary School Stobreč, Jasminka Lisac, Srednja škola Delnice, Croatia

This training is designed for teachers and parents, with the goal to empower them with the knowledge and tools they need to guide kids towards making safe and smart choices in their digital lives. The main goal is to encourage them to start discussions with children about online user habits. By the end of this workshop teachers and parents will be familiar with the responsible use and Cybersafe behavior and will become inspired to promote and evangelise the uptake, sharing, and reuse of digital learning resources in schools. The training provides knowledge and understanding to ease and take away teachers' fears and their negativity towards new technologies, by presenting positive examples and developing a better understanding of how e-Learning works in a school or at home.

### Green Ideas 2015 - Facilitating Communities in Green Education

Nikolaos Marianos, Greek Research and Technology Network, Greece

To reach the goal mentioned in the title, educators, learners, researchers and representatives of global initiatives focused on green education will be mixed to utilise their ideas and develop action plans. The outcome would be a tangible plan to use innovative technological solutions offered by organisations like the Greek Research and Technology Network (GRNET SA, www.grnet.gr) and Agro-Know (www.agroknow.gr) and EU co-funded initiatives like GLN (www.greenlearningnetwork.eu) and GreeNET (http://greenet.ea.gr/) to support existing active communities like the school community of ODS (www.opendiscoveryspace.eu) consisting of 3374 schools and 8575 teachers.

Venue: EA School Gardens

# Fighting against Bullying and Discrimination; Awareness Techniques & Planning of an Effective Strategy

Anna Zoakou, Vassiliki Zagarelou, Ellinogermaniki Agogi, Greece

The @MINDSET project (http://bdfprojects.wix.com/mindset) supports diversity management within educational settings, by providing appropriate tools for teachers to deal with diversity issues, tackle the bullying phenomena, while better encouraging students to become active citizens and empathising adults. The workshop will introduce bullying and discrimination and how they are expressed. It will focus on warning signs and a better identification of students who bully and those students who are being bullied. Participants will be provided with clear ideas and strategies for addressing a range of bullying behaviours and with the necessary techniques to de-escalate student behaviours that may become hostile and aggressive. Via establishing collaboration they will discuss and share experiences, building upon the progressive establishment of a sustainable community of practice.

# How to Apply for an Erasmus+ KA1 Grant

Eleni Chelioti, Ellinogermaniki Agogi, Greece

This workshop is dedicated to school teachers and Heads of Schools who are interested in participating in in-service training activities and professional development courses in countries across Europe through Erasmus+ funding. The application process for the grant will be discussed and useful advice and tips will be recommended focusing on the specific parts in order to support schools in submitting a successful proposal. By the end of the workshop participants will be familiar with organisation skills, proposal writing, assessment of school needs and teachers' own professional competences.

# The "Big Ideas of Science" as Means to Promote Multidisciplinary Science Activities – Showing our Students the Bigger Picture through a Federation of Online Labs

Tsourlidaki Eleftheria, Ellinogermaniki Agogi, Greece

Participants will learn the "Big Ideas of Science" concept and, using online labs to interweave different science subject domains into everyday teaching, they will be provided with scenarios of use that will increase student engagement in science related activities, The demonstrated activities are proven to help students acquire a better perspective on the connection between different natural phenomena and laws. Participating in minds-on and hands-on sessions will allow delegates to record their own perspective on what the "Big Ideas of Science" are and compare them to those existing in bibliography. The training will include presentations of already existing activities that establish the use of online labs to show how various science topics can be connected on the base of a certain "Big Idea of Science".

#### 16:00 - 16:30 Coffee Break

# 16:30 - 18:00 Session B: Synergy Session

Chair: Ildikó Mázár, EDEN, United Kingdom

#### OEI2

Henri Pirkkalainen, University of Jyvaskyla, Finland

#### **Open Education Europa**

Stylianos Mystakidis, Maria Perifanou, Open Education Europa, Greece

#### eLene4work

Argiris Tzikopoulos, Junior Achievement Greece, Greece

#### ELID

Asimina Kontogeorgiou, Regional Directorate of Education in Thessaly, Greece

# **Umweltlehrgang VWG/Siemens**

Michaela Marterer, Thomas Hrastnik, Gottfried Maier, Peter Hartel, STVG, Austria

#### **GO EcoSocial Training**

Gottfried Franz Mayer, Okosoziales Studierendenforum, Austria

# 18:00 - 18:30 Innovative Teachers' Award Ceremony

Awarding the 18 presenting teachers

# SUNDAY 20. 09. 2015

# 11:00 - 12:30 Plenary Session 3: Inspiring Science Education: Introduction and Interactive Demonstration Moderator: Angelos Lazoudis, Ellinogermaniki Agogi, Greece

Involving teachers in more than 5000 schools all over Europe, Inspiring Science Education is all about providing the tools to make science education more challenging, more playful and above all more imaginative and inspiring for today's students, the citizens of tomorrow's world. Find out more about the context, opportunities and approaches being piloted in this project during this interactive session.

### **Introducing Inspiring Science Education**

Angelos Lazoudis, Ellinogermaniki Agogi, Greece

# Presentation and Demonstration of the Inspiring Science Education Portal and the Opportunities it Offers to Teachers and Students

Lamprini Kolovou, INTRASOFT, Greece

# How Teachers are Using ISE in their Everyday Teaching

Rosa Doran, NUCLIO, Portugal

# ISE Teacher and Finalist in the Learning with Light Competition, 2014

Nikolaos Nerantzis, TEE & EPAL Eidikis Agigis, Serres, Greece

#### 12:30 - 13:00 Coffee Break

# 13:00 - 15:00 Training Session 2

### Social Media for Teaching and Learning

Yasemin Gülbahar, Ankara University, Turkey

The training will start with a presentation about "Instructional Methods of Teaching with an Online Focus" and continue with a discussion about "Flexible Design Approach", possible risks and benefits. After the overview of "Pedagogical Differences between Media", participants will be expected familiarise themselves with and share information related to "Pedagogical Characteristics of Social Media for a Teaching Module/Course". In the second part of the training, the participants will use an established "Social Media Toolkit" following a presentation about "Models for Social Media Selection". Finally, possible implementation scenarios for using social media will be shared by attendees.

# Designing for Learning and Inclusion: Universal Design for Learning in action

Katerina Riviou, Ellinogermaniki Agogi, Greece

The workshop aims at raising awareness around the topic of Universal Design for Learning and help delegates in daily application of inclusive practices. It will introduce inclusive learning strategies on learning variability (by UDLNet) including practices from the specific field of home and hospital education – HHE (by LeHo). Participants will take part in a discussion and brainstorming session where the teams will evaluate the good practices available in the dedicated inventories (http://udlnet.di.uoa.gr/ and http://www.lehoproject.eu/) and share their own practices to promote inclusion. Participants will also be provided the opportunity to join a special community of practice that will allow them to exchange ideas, experiences, concerns and educational resources with fellow teachers across Europe.

Venue: Computer lab (remote participation will be also be arranged, through Skype, upon request)

# 15:00 - 15:30 Coffee Break

### 15:30 - 17:00 Parallel Sessions C

# Session C1 Modernisation of School Education by International Co-operation and Networking

Chair: Ferenc Tátrai, EDEN, UK

# Supporting ODS Schools in Cyprus: Experience of a National Coordinator

Kyriakoula Georgiou, Thanasis Hadzilakos, Alexandros Kofteros, Anna Mavroudi, Open University of Cyprus, Cyprus

# Impact on Curricula, Schools and Educational System: Open Discovery Space Lesson Learnt

Maria Fragkaki, University of Surrey, Ferenc Tatrai, EDEN, United Kingdom, Katerina Riviou, Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece, Munir Abbasi, Lampros Stergioulas, Masoud Fakhimi, Georgios Xydopoulos, University of Surrey, United Kingdom, Marlies E. Bitter-Rijpkema, Open University of the Netherlands, The Netherlands

# Learning Assessment and Sustainable Business Models for OER Initiatives

Georgios Xydopoulos, Munir Abbasi, Maria Fragkaki, Masoud Fakhimi, Lampros Stergioulas, University of Surrey, United Kingdom, Katerina Riviou, Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece

# Acceptability of Social OER Environments in European Schools

Henri Pirkkalainen, Kati Clements, Jussi P.P. Jokinen, University of Jyvaskyla, Finland, Ruxandra Margineanu, Unisoft Romania SA, Romania, Jan Pawlowski, Ruhr West University of Applied Sciences, Germany, Katerina Riviou, Ellinogermaniki Agogi, Greece

# Towards Successful Partnerships between Schools and Parents: Needs Analysis Findings from the E-STEP Project

Eleni Chelioti, Ellinogermaniki Agogi, John Garofalakis, Andreas Koskeris, Evangelia Boufardea, Computer Technology Institute and Press "Diophantus", Greece

# Introducing Pre-Service Primary Education Teachers to the 21st Century Skills: Changing Schools as Learning Organizations by Utilising Digital Games

Margarida Romero, Laval University, Canada, Niki Lambropoulos, London South Bank University, United Kingdom, Vaibhav Birwatkar, Yashwantrao Chavan Maharashtra Open University, India

# Session C2 Cases of Using e-Learning in Schools in Special Settings

Chair: Eleni Chelioti, Ellinogermaniki Agogi, Greece

# Defying the Odds: Teacher Dedication and Cutting Edge Technologies Turn Around an Underprivileged School

Alexandros Kofteros, Agios Spyridon Elementary School and Open University of Cyprus, Thanasis Hadzilacos, Open University of Cyprus and Cyprus Institute, Cyprus

# **Technology Traces on Children Handwriting**

Antonella Poce, Benedetto Vertecchi, Francesco Agrusti, University Roma III, Italy

# Getting to Know Yourself and the Others: Using LMS for a Collaborative ICT & Literature Project

Alexandros Kofteros, Agios Spyridonas Elementary School, Cyprus, Avraam Triantafyllidis, 2<sup>nd</sup> Kalyvia Elementary School, Anastasios Kollias, Argyri – Laimou Private Elementary School, Antonios Skellas, 2<sup>nd</sup> Voula Elementary School, Greece, Neofyta Varnavidi, Agios Spyridonas Elementary School, Cyprus

# Studying the Flipped Classroom Model in Primary School History Teaching

Vasiliki Aidinopoulou, Greek-French School Jeanne d' Arc and University of Piraeus, Greece, Demetrios G. Sampson, University of Piraeus, Greece and Curtin University, Australia

# Educational Innovations in the Bulgarian School and the Role of Libraries in their Implementation

Marina Encheva, Plamena Zlatkova, State University of Library Studies and Information Technologies, Bulgaria

# Teaching and Assessment Methods in the Field of Mathematics, Science and Technology

Munir Abbasi, University of Surrey, United Kingdom, Sarantos Psycharis, ASPETE, Greece, Katerina Riviou, Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece, Georgios Xydopoulos, Lampros Stergioulas, Maria Fragkaki, University of Surrey, United Kingdom

### 17:00 - 19:00 Visit to the Acropolis Museum

For those who have booked for the event

The tour includes the transfer (by charter bus) at 17:00hrs from Ellinogermaniki Agogi (Conference venue) and 2 hours guided tour to the Acropolis Museum by a professional licensed guide.

#### 20:30 - 23:00 Conference Dinner

For those who have booked for the event

The social dinner will take place at a traditional tavern in the Plaka area, in walking distance from Acropolis. Buses will take participants back to their hotels after the dinner.

# MONDAY 21, 09, 2015

### 09:00 - 10:30 Parallel Sessions D

### Session D1 Good Practices of ICT Enhanced Methods and Tools in School Education

Chair: Stephanos Cherouvis, Ellinogermaniki Agogi, Greece

# 3D Printing in Science and Engineering Education. A Best Practice: Studying, Designing and 3D Printing an Operational Model of a 2100 Year-Old Computer, the "Antikythera Mechanism"

Georgios Mavromanolakis, Ellinogermaniki Agogi, Theodoros Manousos, Maria Kechri, Panagiota Lida Kollia, Gerasimos Kanellopoulos, Lyceum of Ellinogermaniki Agogi, Greece

### An Educational Design-Driven Representation Metadata Model for Lesson Plans

Stylianos Sergis, University of Piraeus, Effrosyni Papageorgiou, Panagiotis Zervas, University of Piraeus, Greece, Demetrios G. Sampson, University of Piraeus, Greece and Curtin University, Australia

### Co-Designing Digital Gaming Activities to Foster Co-Creativity in Learning

Pavlos Koulouris, Nikos Zygouritsas, Evangelia Dimaraki, Elias Stouraitis, Ellinogermaniki Agogi, Greece

### Spectra – Lesson Plan

Ekaterini Maria Rozi, 3rd Gymnasio of Glyfada – Ministry of Education, Greece

### Teacher Training Using Serious Games: The SimAULA project

Sofoklis Sotiriou, Kalliopi-Evangelia Stavroulia, Ellinogermaniki Agogi, Greece

# Session D2 Collaborative and Networked Learning in Digital Environments

Chair: Éva Suba, EDEN, UK

# School on the Cloud: Transforming Open Classroom

Kostis C. Koutsopoulos, National Technical University of Athens, Chrysanthy Sotiriou, Doukas School, Greece

# Peer Scaffolding During Virtual Tinkering in a Constructionism Learning Environment Matina Pospori - Marathefti, Cyprus University of Technology, Cyprus

# Computer Supported Collaborative Learning in Small Teams for Scratch: Programming Skills for Year 4 students at the 6th Primary School of Patras, Greece

Ioanna Anyfanti, Konstantinos Vasileiadis, Mira Zeit, Andriana Vgenopoulou, University of Patras, Marianna Mpartzakli, Niki Lambropoulos, 6<sup>th</sup> Primary School of Patras, Greece

# Visualise and Evaluate Interactions of Students in Online Discussion Forums Muesser Nat, Adeleye Idowu, Cyprus International University, Cyprus

# A Network of Peers and Practices for Addressing Learner Variability: UDLnet - The Case of Science Teaching

Katerina Riviou, Ellinogermaniki Agogi, Nikolaos Nerantzis, Special Vocational High School of Serres, Greece

# Apps versus Demonstration Experiments – Improvement of Quality of Physics Teaching in Secondary Education by the Use of Tablets

Manfred Lohr, BG/BRG Schwechat, Austria

# Session D3 ICT Supported Science and Technology Teaching Models and Exercise in Schools

Chair: Ferenc Tátrai, EDEN, UK

### Flipped Classroom Teaching Model Templates for STEM Education

Stylianos Sergis, Centre for Research and Technology – Hellas, Panagiotis Vlachopoulos, University of Piraeus, Demetrios G. Sampson, University of Piraeus, Centre for Research and Technology – Hellas, Greece and Curtin University, Australia

# Characterizing Online Labs for School STEM Education Using Educational Metadata

Panagiotis Zervas, Centre for Research and Technology Hellas, Anastasia-Evangelia Authentopoulou, University of Piraeus, Greece, Demetris G. Sampson, Centre for Research & Technology – Hellas, Greece and Curtin University, Australia

# Characterizing Digital Educational Tools for School STEM Education Using Educational Metadata

Panagiotis Zervas, University of Piraeus / Centre for Research and Technology Hellas, Eleni Boulmanou, University of Piraeus, Greece, Demetris G. Sampson, Curtin University, Australia

Modern Methods of Introducing Basic Physics Concepts: The Coordinates and the GPS loana Stoica, Tudor Vianu National High School of Computer Science, Romania

# Inspiring Science Education: Results on Students' Problem Solving Capabilities Using 3 Pilot Educational Scenarios

Emmanuel Chaniotakis, Sofoklis Sotiriou, Ellinogermaniki Agogi, Panagiota Argyri, Evangelliki Sxoli Smyrnis, Greece

### Cultivating the 21st Century Skills in the Microcontollers Lab

Anthonios Andreatos, Hellenic Air Force Academy, Greece

#### 10:30 - 11:00 Coffee Break

# 11:00 - 11:40 Plenary Session 4: Open to What?: the Future of European Education in the Digital Revolution

Keynote by Alan Bruce, Universal Learning Systems, Ireland followed by Open Panel Discussion

Chair: António M. Teixeira, EDEN President

Panel members:

Rosa Doran, NUCLIO / GHOU / Portuguese Astronomical Society, Portugal Antonella Poce, Roma Tre University, Italy Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece Christian Stracke, Open Universiteit Nederland, The Netherlands

# 11:40 - 12:00 Opening up the Classroom – How Inspirational Ideas, Creative Teachers and Innovative Tools are Changing Schools

Keynote by António Teixeira, EDEN President

followed by the introduction of the EDEN badges and Best Practice Initiative Award Ceremony

### 12:00 - 13:00 Plenary Session 5

Presentation of the AESOP (Advanced Electronic Scenarios Operating Platform)

### 13:00 - 14:00 Lunch Break

# 14:00 - 16:00 Training Session 3

### Using Open Badge packs to support teaching across the curriculum

Matt Rogers, Education Program Manager - DigitalMe

The workshop explains the use of Open Badges to scaffold and support cross curricular teaching in schools. Participants will learn about the idea of Open Badges, explore the anatomy of a badge, and what this means in terms of accrediting and recognising learning. Attendees will explore the difference between Digital Badges and Open Badges, and the additional sharing and showcasing opportunities that Open Badges supply. The workshop gives a closer look at how Badge Packs can be used to both enhance and support teaching across the curriculum – focusing on specific sets of badges that tie in, initially, with a computing curriculum, but then looking more widely at other curriculum areas such as Science and Maths. To do this, participants will be able to explore the badges themselves, and begin to understand the process of taking a badge, submitting evidence, claiming their badge and sharing this across the social web.

### ProsocialLearn: introduction to prosociality & prosocial learning games

Evangelia Dimaraki, Anna Zoakou, Ellinogermaniki Agogi, Greece

ProsocialLearn (http://prosociallearn.eu/) is founded on the hypothesis that children at risk of social exclusion should benefit from digital games tailored to teach prosocial skills (altruism, cooperation, caregiving, etc.) that can help them achieve academically, appreciate team work and recognise the value of understanding other people's needs. This workshop will initiate educators to the ecosystem of prosocial games by offering a theoretical framework and engaging the audience with the process of design and development of learning activities corresponding to certain prosocial features. Attendees will first be introduced to the rationale of prosociality and the prosocial learning games. The prosocial game will transfer participants in the most interactive manner to the ecosystem of prosocial games and collect their feedback on improvement suggestions. In the last session of the participants will work in groups and reflect upon certain features of prosociality, aiming at designing activities that will enhance certain prosocial traits, i.e. empathy, trust, fairness, compassion, generosity, collaboration and emotional intelligence.

16:00 - 16:30 Closing Address and Farewell Reception

António M. Teixeira, EDEN President