



INTERNATIONAL CONFERENCE

ORGANISED BY THE EU PROJECT

CREATIVE LITTLE SCIENTISTS

**“Enabling Creativity through Science and
Mathematics in Early Years Education”**

22-23 March 2014, Pallini Attikis, Greece



The project CREATIVE LITTLE SCIENTISTS has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) for research, technological development and demonstration under grant agreement no 289081.



CONFERENCE PROGRAMME

Saturday 22 March 2014

Room for Plenaries: Central Meeting Hall (Basement)			
09.00-09.30	Registration		
09.30-10.30	Official Opening Chair: <i>Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece</i> <i>Representative of the Greek Ministry of Education and Religious Affairs, Sport and Culture</i>		
10.30-11.30	Plenary 1 - Keynote Address Journeys in creativity <i>Patricia Cochrane, CapeUK</i> Comments and Questions		
11.30-12.00	Coffee Break		
12.00-12.45	Plenary 2 - What have we learned? The Final Report from the EU 'Creative Little Scientists' Project <i>Fani Stylianidou and Dimitris Rossis, Ellinogermaniki Agogi, Greece</i>		
12.45-14.00	Plenary 3 – Round Table Responses to the Final Report from Stakeholder Organizations Chair: <i>Suzanne Gatt, University of Malta, Malta</i> <i>Katerina Plakitsi, Associate Professor at University of Ioannina, Greece</i> <i>Jukka Rahkonen, Teacher and Advisor to the Finnish National Board of Education, Finland</i> <i>Peter Gray, Research manager, European Projects, NTNU, Norway</i> <i>Liz Lawrence, past Chair of Association for Science Education, UK</i> <i>Wim Peeters, Pedagogic Advisor at vzw PBDKO and Vice President of GIREP, Belgium</i> Comments and Questions		
14.00-15.00	Lunch (offered by <i>Ellinogermaniki Agogi</i>)		
15.00-17.00	Parallel Thematic Workshops (only by invitation)		
	Theme A	Theme B	Theme C
	Policies for enabling Creativity through Science and Mathematics in Early Years Education	Teacher Education for enabling Creativity through Science and Mathematics in Early Years Education	Reflections on Research into enabling Creativity through Science and Mathematics in Early Years Education
Room:	B 123	B 121	B 119
Chair:	Sari Havu-Nuutinen <i>University of Eastern Finland, Finland</i>	Ashley Compton, <i>Bishop Grosseteste University College Lincoln, United Kingdom</i>	Teresa Cremin, <i>Open University, United Kingdom</i>
Presenter:	Fani Stylianidou, <i>Ellinogermaniki Agogi, Greece</i>	Hilde van Houte, <i>Arteveldehogeschool Gent, Belgium</i>	Esme Glauert, <i>Institute of Education, University of London, United Kingdom</i>
Rapporteur:	Peter Gray, <i>Research Manager, European Projects, Norway</i>	Derek Bell, <i>Education Consultant, UK</i>	Janna Pahnke, <i>Haus der kleinen Forscher, Germany</i>
17.00-17.30	Coffee Break		
17.30-18.00	Closing of Day 1		



Sunday 23 March 2014

Room for Plenaries: Central Meeting Hall (Basement)

09.00-09.30	Registration		
09.30-10.00	Plenary 1 – What have we learned about creativity in the Greek early years science and mathematics education? Findings about Greek education from the EU 'Creative Little Scientists' Project <i>Dimitris Rossis and Fani Stylianidou, Ellinogermaniki Agogi, Greece</i>		
10.00-11.30	Plenary 2 – Other relevant EU-Projects Chair: <i>Adelina Sporea, NILPRP, Romania</i> Pri-Sci-Net - <i>Suzanne Gatt, University of Malta, Malta</i> SECURE - <i>Wim Peeters, Coordinator, Belgium</i> SiS-Catalyst - <i>Peter Gray, Nat. Coordinator, Norway</i> CREANET - <i>Nicola Catellani, Coordinator, Italy</i> EARLY CHANGE PROJECT – <i>Vasilis Grammatikopoulos, Coordinator, Greece</i>		
11.30-12.00	Coffee Break		
12.00-13.30	Parallel Teacher Workshops		
	Workshop BEE	Workshop CAT	Workshop DOLPHIN
	Language: English	Language: Greek	Language: Greek
	Encouraging creativity within problem solving and inquiry in early mathematics and science <i>Esme Glauert, Institute of Education, University of London, UK</i> <i>Ashley Compton, Bishop Grosseteste University College Lincoln, UK</i> <i>Hilde van Houte, Arteveldehogeschool Gent, Belgium</i>	Teaching about sound (to 6-8-year olds) (Learning activities developed as part of the Pri-Sci-Net project) <i>Marianna Kalaitisidaki, University of Crete</i> <i>Nektarios Tsagliotis, 9th Primary School of Rethymno, Greece</i> Physics and astronomy activities for preschool and first years of primary school <i>Maria Kallery, University of Thessaloniki, Greece</i>	Teaching about energy in preschool <i>Dimitris Koliopoulos, University of Patras, Greece</i> Discovering the world of probabilities <i>Evdoxia Siolou and Jenny Pange, University of Ioannina, Greece</i>
			Reflecting on creativity in teaching and learning science & mathematics in preschool <i>Stella Antonakopoulou, 13th Kindergarten of Rethymno</i> <i>Maria Spatoula and Katerina Krokou, Ellinogermaniki Agogi, Greece</i>
13.30-14.30	Lunch (offered by <i>Ellinogermaniki Agogi</i>)		
14.30-15.30	Plenary 3 – Summary Reports from Saturday Workshops Chair: <i>Annette Scheersoij, University of Bonn, Germany</i> Key Messages for Policy Development and Implementation Presentations by Workshop Rapporteurs <i>Comments and Questions</i>		
15.30-16.30	Plenary 4 - Keynote Address Inquiry-oriented science teaching: the role of design-based research <i>Costas Constantinou, University of Cyprus, Cyprus</i> <i>Comments and Questions</i>		
16.30-17.00	Closing Remarks <i>Sofoklis Sotiriou and Fani Stylianidou, Ellinogermaniki Agogi, Greece</i>		



creative little SCIENTISTS



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About CREATIVE LITTLE SCIENTISTS

Creative Little Scientists is a 30-month EU funded comparative study working across nine participating countries: Belgium, Finland, France, Greece, Germany, Malta, Portugal, Romania and the UK, which have been selected to represent a wide spectrum of educational, economic, social and cultural contexts. The project focuses on the relationships and synergies between science and mathematics education and creativity in preschool and early primary school (up to the age of 8). *Creative Little Scientists* seeks to document current reality in the nine partner countries of the study, through survey and classroom focused research. The study aims to mainstream good practices by proposing changes in teacher education and classrooms encompassing curriculum, pedagogy and assessment.

KEYNOTE ADDRESSES

Saturday 22 March 2014 – 10.30-11.30

Journeys in Creativity

Patricia Cochrane

Founding Chief Executive CapeUK

Patricia will explore the growing recognition of the value and importance of creativity across the EU and beyond. She will outline the challenge of creativity at times being conflated with the arts by policy makers (and hence the significance of the *Creative Little Scientists* research project). Patricia will reflect on the value and impact of research in informing practice and share some of the challenges of introducing creativity in schools in the UK and in changing and influencing practice in teachers and other leaders. She will share approaches to professional development which we have adopted in the UK. The talk will be illustrated by examples drawn from experience of running national and experimental programmes and will relate this, wherever possible, to *Creative Little Scientists* project.

Sunday 23 March 2014 – 15.30-16.30

Inquiry-oriented science teaching: the role of design-based research

Costas P. Constantinou,

Professor of Science Education, University of Cyprus

Reflective inquiry is a teaching and learning framework that has received widespread support as a means of promoting reform in science education and quality improvement in teaching and learning outcomes. Through recent developments in science education research, there exists established knowledge that highlights the principles, methods and main characteristics of teaching resources and practices that can facilitate inquiry oriented teaching and learning. As in other frameworks that received attention by the science education research community in the past, there is a danger that lethal mutations would hijack the effort and would lead to another cycle of widespread disappointment following concerted reform initiatives. In this presentation, I will discuss Design Based Research as a methodological framework that draws on partnerships between teachers and researchers, schools and universities in an effort to engage in methodical design of teaching and learning practices that can be monitored, evaluated and validated as effective mechanisms for promoting reflective inquiry. I will illustrate the potential impact of this approach in terms of promoting quality improvements in science teaching with results from EU funded projects.

