Implementing CREATive Strategies Into Science Teaching

Greek students “Learning Science through Theater”

The project is based on the CREAT-IT pedagogical framework and provides schools with “Parallel Worlds”, a script outline focusing on the history of the universe and life to guide students in preparing a performance. Teachers can make the play part of the curriculum of the respective lessons (Physics, Astronomy, Music, biology, Art). Science View realized the second supporting workshop for teachers on the 7th February 2015. At the moment, rehearsals are proceeding successfully with the support of professionals (see photo) and the final staging of the plays is planned for May 2015. “Learning Science through Theater” is organised in collaboration with the School of Philosophy, Pedagogy and Psychology of the National and Kapodistrian University of Athens, Greece.

WASO-inspired activities in Belgium

Tim Acke of the Artesis Plantijn University College in Antwerp, who participated in the CREAT-IT WASO Summer School, is currently developing creative science-inspired activities in Belgium. Here is one of the images he and his colleagues produced as part of the work!

Bachelor Thesis on CREAT-IT at the University of Leuven

Lize Coopens, a Bachelor student at the University of Leuven, Belgium, wrote her Bachelors’ Thesis about the CREAT-IT Project. Lize’s thesis focuses on the possibilities and challenges of establishing CREAT-IT activities in schools in Flanders.

Presentation in Holland

CREAT-IT was successfully presented to Deans, study leaders, internationalization personnel and teachers of the Artesis Plantijn University College in Antwerp, Belgium and the Stenden College in Holland on 10 February 2015.

WASO seminar in Norway

On February 25th 2015, Kirsti Aknes and Oded Ben-Horin led a Write a Science Opera (WASO) training seminar for 27 teachers at Tau School, in the Strand municipality in Southern Norway. Primary school teachers of various disciplines (Science, Math, Norwegian, Music and more) developed a scenario for primary school pupils about photosynthesis.

The seminar ended with a focus group evaluation led by Djurdja Timotejevic from the Center for Promotion of Science (CPN) in Serbia, which is the organization that leads the CREAT-IT Evaluation and Quality Assurance process. During the focus group discussion, Norwegian teachers provided important feedback regarding how they perceive WASO projects as a teaching framework, and how exercises from the WASO approach may be used in everyday teaching.

CREAT-IT Summer School

Introducing the Creative Science Classroom

Athens, Greece, 12/07 - 17/07 2015

The CREAT-IT Summer School in Athens, Greece will be a meeting point for science educators, scientists, artists, art educators, and policy-makers wishing to learn creative strategies in today’s science teaching. Summer School participants will experience three distinct but inter-related Case Studies which together provide a large picture of the promising possibilities in the field of creative science teaching. The Case Studies, Science Theatre (ST), Write a Science Opera (WASO) and Junior Science Café (JSC), will be experienced during hands-on and on-stage work. In addition, in-depth analysis of creativity in science education will take place, as well as the creation of new, original scenarios as part of a growing online network.

This year’s scientific exploration will be dedicated to the theme of Cosmic Light, to coincide with the International Year of Light 2015 (see page 3).

European researchers join CREAT-IT

Dr. Giedrė Strakšienė is a researcher in Communication between Art and Science at Klaipeda University, Lithuania. She believes that an effective communication process based on mutual understanding between artists and scientists could potentially increase the possibilities of discovering New creative methods in the education field, that are strongly needed in the contemporary knowledge-based society. Dr. Strakšienė has showed much interest in the CREAT-IT pedagogical methods and is interested in exploring their implementation in Lithuanian schools, despite the challenges that might arise.

- How did you hear about the CREAT-IT project?
I heard about the CREAT-IT project from a Norwegian colleague about two years ago.

- Why is it interesting for you to explore whether activities inspired by CREAT-IT can be implemented in Lithuania?
Firstly, it is related to my research area "Communication between art and science", so it is important for me to analyse these activities more deeply from an educational perspective. Secondly, I think the Write a Science Opera method can be successfully applied and implemented in Lithuanian schools, as pedagogues here sometimes use similar methods such as project method, drama method, creative method, and others.

- What kind of challenges do you think implementation of activities inspired by CREAT-IT would have in Lithuanian schools?
I would single out some challenges such as: lack of time due to a large volume of curriculum, lack of methodological literature addressed to science teaching through art. Also, some lack of knowledge and experience regarding how to organize the creative process in class, because the creative activity sometimes disrupts the classical education process and is difficult to control. Finally, teachers' lack of self-confidence, and sometimes lack of positive attitude in this field.

- What is your personal background?
Degree of Lithuanian language and drama teacher (Klaipeda university, in 1993); Master's degree of Art (Theatre/Drama) (Klaipeda University, in 2001); Ph.D. in Social Sciences (Education) (Klaipeda University, in 2013).

- Have you ever collaborated with scientific researchers at Klaipeda University before?
My collaboration experience with scientific researchers from the Science Department (Klaipeda university) reflected in preparation and implementing national projects supported by Lithuanian research council, and international projects: "Capacity Building " (SBP-WTPB 02.04.00-22-017/10-00) and "CaMo: Case method of Technology for Practical Use of Training Teachers" ES-Comenius-C21".

- What do you think about the potential of creative meeting points between science and art with regard to unleashing creativity in the science education context?
As a scientist who works collaboratively with artists, scientists and pedagogues, I am interested in the possibilities of improving communication processes between science and art disciplines, as well as between artists and scientists. I believe that a meeting point of science and art provides fertile ground for creative enquiry. Interdisciplinary research and collaborations in the field of art and science embrace the potential to explore diverse approaches and understanding the development of communicative ways. An effective communication process, mutual understanding, close contact between artists and scientists potentially increases possibilities of discovering new creative methods in the education field, as well. WASO is an example of a practice which tries to enlighten creativity as a common impulse between sciences and arts, so that the path to knowledge is similar in both areas. Finally, it is important to note that innovative teaching/learning methods are strongly needed in the contemporary knowledge-based society.

- What was the purpose of your trip to Stord Haugesund University College in Norway?
I aimed to deepen my knowledge and competences with regard to analysing the communication process between science and art, and scientists and artists. This is true for both the practical aspect as well as for theoretical knowledge of the methodological tool. The research was designed in the form of interviews with Norwegian scientists and artists, observation in school (Bergen), and video material which has been created by Write a Science Opera team at Sagvåg School at Stord, Norway.
2015 will be filled with light festivals, light and art, physics courses, lectures, astronomy, astrophysics, and street lighting as part of the International Year of Light and Light-based Technologies 2015. This year was proclaimed by the United Nations to raise global awareness about light-based technologies, to promote sustainable development and to provide solutions to global challenges in energy, education, agriculture and health.

«SkyLight – a Global Science Opera» is an ICT-based international creative education project within the Write a Science Opera (WASO) initiative and CREAT-IT. «SkyLight» has been endorsed by the International Astronomical Union as an official project of the International Year of Light 2015. During 2015, students from schools in 28 countries within the Galileo Teacher Training Programme, Global Hands on Universe, and a network of cultural institutions will collaborate to create and perform a Science Opera inspired by Cosmic Light together via ICT tools, providing a platform for both creative science learning as well as cross border friendship and cooperation. The science opera’s libretto was started by pupils in Portugal, and is now being continued in Brazil. In early April it will be sent to Lithuania. By the summer of 2015, this science opera’s libretto will have made its way to several more countries, after which it will be composed, staged and performed. The performance of «SkyLight» will take place in the 28 involved countries simultaneously in October 2015 to coincide with the final conference of the CREAT-IT project.

To find out more about the International Year of Light visit: [http://www.light2015.org/](http://www.light2015.org/)

Get to Know the Creative Science Classroom

The Portal - [portal.creatit-project.eu](http://portal.creatit-project.eu)

The project’s website provides an entryway to the CREAT-IT Portal which makes the project resources available to teachers, students, artists and researchers. Get familiar and participate in:

- **Junior Science Cafes**
- **Science Theater**
- **Write A Science Opera**

The Website - [www.creatit-project.eu](http://www.creatit-project.eu/)

The development of the CREAT-IT website allows for constant online presentation and dissemination of the project’s progress and results. The website acts as the project’s main hub of information about the project’s planned activities and serves as a provider of relevant educational activities in school.