Learning Science through Theater

Students innovate, create and learn by performing scientific notions

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LSTT in a nutshell

WHAT IS IT? "Learning Science Through Theater" is an educational activity embraced at both Greek and European level, promoting Science Communication & Education in a way that



"connects the school with the local community as well as the research community through an innovative and creative approach"



The educational activity "Learning Science Through Theater" was initiated by Science View and is carried out annually in cooperation with several institutions (Faculty of Philosophy, Pedagogy and Psychology of National and Kapodistrian University of Athens, Ellinogermaniki Agogi, NOESIS Science Center and Technology Museum and more).

In the context of the initiative, students from all grades (primary & secondary schools) are expected to dramatize scientific notions and knowledge drawn from their school curriculum.

ORIGINS: The activity was created in the framework of the European project **CREAT-IT** (http://www.creatit-project.eu/), based on the features of inquiry learning on science related courses (**Inquiry Based Science Education**), as well as on the pedagogical framework of the European project **CREATIONS** (http://creations-project.eu/). It is one of the accelerators of the European project **Open School for Open Societies** (OSOS) (http://www.openschools.eu/) validated and recommended by the Institute for Educational Policy (IEP) for participating schools. It is also one of the implementation cases in Primary Education Schools of the European projects **Creativity, Art and Science in Primary Education** (CASE) (http://www.project-case.eu/) and **CREATEskills** (http://createskills.eu/).



A story of success



INITIATION OF LSTT

From planning to action, LSTT was first implemented in the context of CreatIT Erasmus+ project.

ENRICHING THE PEDAGOGICAL FRAMEWORK

The pedagogical framework was enriched with elements from the CREATIONS H2020 project. LSTT was recognized as one of the demonstrators of CREATIONS as well as a training case for STEAM Erasmus+ project.

TRANSFORMING TO A NATIONAL ACTIVITY

Implemented for the first time as a Hellenic National activity in the format of an educational activity that awards creativity and innovation for Science & Art on stage.

EXPANDING TO EU & EVOLVING FRAMEWORK

Identified as EU accelerator of the OSOS H2020 project and recognised by the Greek Institute of Educational Policy as a national educational practice. Expanding the framework towards primary education through CASE and CREATEskills Erasmus+ projects, where it is one of their implementation cases.

AWARDED ACTION

Awarded by Athens Science Festival as one of the best actions in the category "Awareness Actions & Campaigns" for Science Communication & Education. LSTT is recognised as a creative science communication case of the SciCULTURE Erasmus+ project.

ESTABLISHING THE STEAM APPROACH IN SCIENCE EDUCATION

LSTT was within the first 20 Accelerators (out of 60) that were selected from OSOS schools in 13 countries. Will be one of the main cases in the course that will be developed from DOTS (Development of transversal skills in STEM) project, that will be implemented until 2022.

THE 1st VIRTUAL LSTT REALISED - THE STEAM IDEAS' SQUARE APPROACH INITIATED

LSTT was organised as a full virtual event with more than 2.500 participants within a weekend, during April 2021. At the same time, our vision for the STEAM IDEAS' Square approach in STEAM Education, was starting through the NEXT STEP project.

In collaboration with





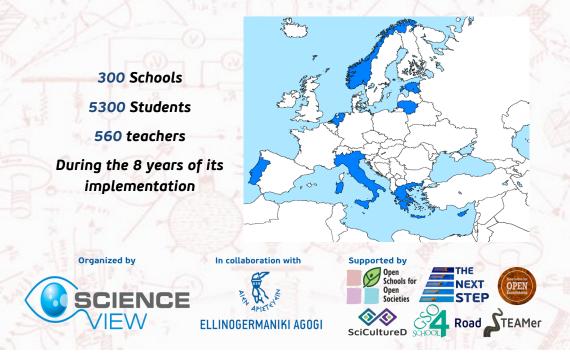
LSTT in 9 countries

LSTT is already an established STEAM activity in Greece. Every year has the support of the Greek Ministry of Education as an official proposed activity for schools in primary and secondary education.



Furthermore, is embraced in **8 European countries** and currently supported by a huge network of individual practitioners dedicated to its implementation, LSTT provides multiple formats that reach out to even the most remote areas.

In total, has already engaged:



An Interdisciplinary approach

LSTT aims to add its contribution to the current efforts of a creative and innovative school by focusing on two key areas that could support the realization of suitable initiatives in every single school.

- 1. Is building on a whole school approach to learning by supporting schools' capacity to work with external organizations so as to explore how such partnerships and networks can be built through a long-term strategy-based on trust and common objectives and how they contribute to key competence development. The development of key competences is further facilitated by the provision of context from other disciplines. Teaching science in the context of the arts, humanities and social sciences is recognised as an important learning aid. This is known as STE(A)M approach to STEM education. Similarly, the infusion of science and maths into the learning of non-STEM disciplines could strengthen key-competence development in those disciplines. Collaboration amongst teachers is one of the key features of LSTT approach, which aims at creating inclusive learning environments that foster competence development for all learners.
- 2. LSTT would like to add its contribution on setting up a roadmap for the transformation of the school classrooms to creative and innovative learning spaces: when thinking about the (re)organisation of a classroom and which pedagogies to use to promote a creative and innovative school, thinking out of the box is the key to success. LSTT initiative is proposing and supporting (within the framework of the NEXT STEP Project) the development and operation of the STEAM IDEAS' Square, an innovative learning environment which will be the nucleus of the school's creative and innovative activities. Connecting curious minds to speed up the flow of ideas through collaboration, prototyping and experimental innovation we aim to create an effective classroom environment for students, teachers, scientists and the local society to ideate, build and test in a collaborative environment and a unique space.



STEAM IDEAS' Square will be a place, a facility, a meeting place. It's a place between science, art and the society to connect all the stakeholders and draw ideas that will be realised with a common purpose, the well-being of the local/national/international community. It will FEEL societal needs, will explore and IMAGINE novel solutions for the future so to CREATE these within the school

and SHARE it with the community. It's a facility designed to generate new ideas in an



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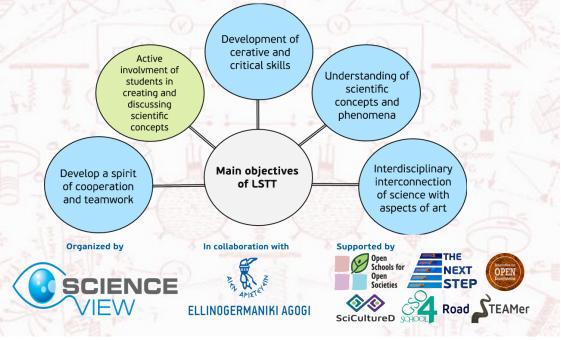
In the context of LSTT,

STUDENTS develop and perform a theatrical performance related to scientific concepts and learn science in a creative way.

The specific objectives of the activity, which have as a central axis the interdisciplinary interconnection of science with aspects of art, aiming at the enhancement of students' interest in science, involve both students and teachers.

More specifically, through this activity, students:

- comprehend scientific concepts and phenomena
- develop a spirit of cooperation and teamwork
- participate actively in the inquiry of scientific concepts
- develop creative and critical thinking skills
- participate in dissemination activities and actions for the promotion and support of their theatrical performance and they contribute in bridging school with society
- develop their social and entrepreneurial skills as well as their emotional intelligence
- create an educational community that cooperates, exchanges opinions and learning resources



TEACHERS on the other hand:

- are engaged in professional development procedures through their cooperation and the exchange of opinions, ideas and teaching material (either in person or through online learning communities)
- are trained in new methodologies for the teaching of science through training workshops and summer schools
- create a sustainable educational community that cooperates, exchanges opinions, material and best practices for science teaching and learning
- become co-creators of educational resources



Don't wait, join us!

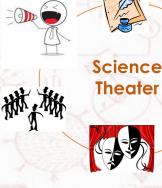
Who can participate?

The activity focuses on students attending:

- Primary Schools
- Secondary Schools

The participations are categorized in:

- Primary Schools (9-11 years old)
- Junior High Schools (12-14 years old)
- High Schools (15-17 years old)





How can I implement the activity?

Schools from all over the world are eligible to implement the activity as long as they communicate and cooperate with the organizers. Furthermore, the national coordinators can organize and conduct events (live performances or video contest) in their country.

The implementation of the activity can be done in the following ways:

- Live performances event
- Video contest event
- Each school can independently implement the activity in its classrooms to tailor its local needs

What procedure shall I follow?

The educators can include their educational activities at relevant sessions of their teaching program:

- as project work
- at educational groups that are operating in the school framework (eg theatrical team or music team)
- lead independent teams

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Suggested Steps:

Share your work - Perform your play in your school or in a final national event

Develop your Science Theater Performance

5

Discuss and decide upon a joint choice of subject (must come from a field of science)

Set up a group of students

Discuss and allocate roles, responsibilities and activities

Enroll your school

Students have the opportunity to collaborate with several stakeholders around the school community. Below are suggested actions that could be realized according to each category of stakeholders:



Learning Science through Theater

It would be a pleasure to welcoming you in our ever-growing LSTT community.

For more information about the activity and the way you can participate, contact us:

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Email: info@scienceview.gr

Community: https://bit.ly/20hBM1d

Visit LSTT website here: **www.lstt.eu**



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