

## Let's steam together

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2	Background	I am Evi Klonou, kindergarten teacher and representative of kindergarten teachers of Messinia. I have participated in many innovative programs concerning art, ancient Greek civilization , mythology and during the 17 years that I work in education.
3	Descriptive title	“Let’s steam together”. Through this training we will support the basic pillars of Steam education: collaboration, problem solving ,creative thinking ,flexibility, digital and technological literacy.
4	Abstract	<p>The policy I propose is going to benefit not only kindergarten teachers of Messinia but all over Greece through distance learning . We need to address immediately the fact that kindergarten teachers poorly implement steam approaches and disciplines in the classroom because they don’t feel confident enough and they are not well prepared for that. It is really important for them because this training will empower and reinforce kindergarten teachers. It will take place the whole coming school year in my school district and through distance learning everywhere.</p> <p>The Institute of educational policy can support my proposal by adopting it as part of the skill labs or as training for teachers.</p>

**Table 2 – Goals**

1	General goal	The basic problem is the lack of confidence and the anxiety that kindergarten teachers experience regarding steam education. Through our program we will ensure that they will receive adequate training and they will develop knowledge, skills and abilities necessary in integrating a steam curriculum.
2	General goal description	<p>Educators need to update their competences in Steam disciplines that are explicitly addressed among the 12 actions included in the European skills agenda(European Commission 2020b).</p> <p>Also the current Erasmus program guide compromises actions to increase the level of interest towards Steam education via the implementation of national Stem strategies. Therefore, building capacities and developing innovative ways in Steam is vital for teachers.</p>
3	Strategic goals	<ol style="list-style-type: none"><li>1. A training program for kindergarten teachers on the steam approach, disciplines and steam educational practices divided into 8 two-hour workshops beginning in October of the next school year. The training will be delivered at the same time live on the internet so there will be participants from other places.</li><li>2. Teachers will organize and conduct 2 open Steam fairs-labs where students will be able to participate in steam educational experiences</li><li>3. After the completion of the training teachers will develop materials for the “Steam suitcase” that can travel across Greece.</li></ol>

**Table 3 – Targets**

1	Beneficiaries	The beneficiaries of my proposal are first of all kindergarten teachers of Messinia but also in every place of Greece or else through distance learning.
		Through this intensive training and the activities that will accompany the program kindergarten teachers will develop steam competences and will be equipped to efficient integrate innovative steam methodology and disciplines in their educational practices. They will also receive recognition for participating and this will open further possibilities to their professional development. It is definitely an asset also for students and the whole school community as they will have the opportunity to experience all the benefits of Steaming.
2	Recipients	Recipients will be the participating teachers, the students of the Steam labs and educators that will receive the “steam suitcase”.
3	Special needs	Teachers in the training program will focus on developing materials and activities that will meet the special educational needs of students. The steam fairs will be accessible for everyone.

**Table 4 – Value Proposal**

1	Value proposal	Intensive training of a group of 50 teachers (25 live and 25 online) on how to face and implement innovative steam challenges through multi-faceted activities.
2	Results	A group of teachers (50) will be trained in the fields of Steam education .Training material is produced and it is transferable .Students having participated and having increased their learning motivation in Steam areas. All these will be evaluated through questionnaires and interviews with the participants.
3	Impact	We aim to make this annual program with the 8 two-hours workshops and the open steam labs a stable presence in the annual education plan of our school district.

**Table 5 – Value Proposal**

1	Cost structure	<ul style="list-style-type: none"><li>• Labor (internal staff)</li><li>• External consultants</li><li>• Administrative costs</li><li>• Travel &amp; Accommodations of external consultants</li><li>• Hardware</li><li>• Software</li></ul>
2	Funding opportunities	<p>There are many funding opportunities for my proposal from the private sector:</p> <ul style="list-style-type: none"><li>-Stavros Niarchos foundation</li><li>-Onassis foundation</li><li>-Captain Vassilis&amp;Carmen Constantakopoulos foundation(benefactors of Messinia)</li></ul> <p>We will publish a public call for expression of interest and we will definitely find sponsors as steam education promotes a new way of thinking and cultivates the so called “21st century skills” and all the organizations and foundations that look towards the future will support this .</p>

**Table 6 – Action Plan**

1	Activities	<ol style="list-style-type: none"><li>1. Agreement with the funding providers of the project (August)and planning of the topics that will be taught in the training.</li><li>2. Open call for kindergarten teachers to apply and for external consultants to participate (September).</li><li>3. Beginning of the program with the 8 two-hour workshops (October).</li><li>4. Every month 2 workshops will be held.</li><li>5.The participants must complete the assignments after each workshop</li><li>6.2 Open Steam labs for students one in December and the other at the end of the training</li><li>7.After the end of the training evaluation will be made from all the participants ,suggestions and all the materials will be assessed and will form the “Steam suitcase”</li></ol>
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**Table 7.1 – Risks/Competition**

1	Risk description	As it is an intensive course the participants must be committed to it. Teachers will need time and effort in order to understand all these new methodologies and ideas.
2	Probability	2
3	Severity	2
4	Mitigation strategy	1.Establishing a steam community where everyone can share their opinions and experiences 2.Steam external consultants that will monitor the performance of the participants and will provide them with support ,technical experience and knowledge. 3. Cultivating a warm and respectful environment so every idea can blossom.

**Table 7.2.a – Risks/Opposition**

1	Risk description	Maybe some teachers and students find this approach difficult, boring or unattractive.
2	Probability	1
3	Severity	2
4	Mitigation strategy	Introductory attractive presentations and videos will be used to explain in detail the content and philosophy of the training. When we will invite students to participate on Steam fairs we will underline the experiential and fun approach of the project.

**Table 7.3.a – Risks/External Menace**

1	Risk description	Pandemic can cause doubts on teachers and students in participating
2	Probability	1
3	Severity	2
4	Mitigation strategy	All the necessary measures and guidelines for Covid -19 will be applied .Teachers can also participate through distance learning.