Course Plan

Making the Maker

**Title:**

Making the maker! Seed the digital competences and entrepreneurshipin the classroom using and making ICT.

**Course introduction**

The development of digital competences is a key issue in the school of the 21st century. It is with the technologies that our future European labor generations will work and compete in a global world. They need to be experts on them to not be defeated. So, it is crucial that we are able to teach them to understand, to use, and to create Information and Communications Technologies (ICT).

This task starts in our own classroom, knowing how to use and take the biggest benefits of the technologies available. We cannot be afraid of them. We need to make them our allies to teach the most different subjects (from math to literature).

Technologies also can be a good way of teaching… technologies. Specially if you can build your own technology product, in other words, if you are a maker and you teach your students to be one.

We would like to introduce you to one of those technologies. We want you to meet Gyro.

Gyro is an Edutainment Robot. It is anopen sourceplatform that combines Software, Hardware, and one online community. With Gyro, students can have fun while learning robotics and programming. You can use it to teach other subjects, from math to art.

The fact that Gyro technology is an Open source is very important. The teachers can download the code and the models. They can study them and create their own versions. After, they can share their derivatives with the community, and redefining their products together.

Nevertheless, we want to share with you more things, like the My Machine project, the Fablabs movement, take you to visit some Fablabs.

We also want to think with you how to implement and enhance the Digital competences in the Europe, starting with your classroom and school.

We wish that you help to build a network in the education community, contacting with teachers from different nationalities and backgrounds.

For all above, we built this course.

**Methodologies**

This course is designed to be very interactive. Accordingly, we mix several methodologies and techniques, like as ice break exercises, team building, debates, network creation, brain storms, theoretical-practical sessions, learning by doing, design thinking, study cases and study visits.

**Program contents:**

* Turning hassle-free the use of technology in the classroom
* Introducing the makers concept
* Introducing the Fablab movement
* Introducing the “eTwinning” tool
* Introducing Gyro as an education tool
* Introducing to My Machine concept
* The implementation of Digital competences in the Europe

**Study visits:**

FabLab of FCT NOVA

FabLab of Lisbon

The Teachers Training Center: CFAE- Centro-Oeste, and its classroom of the future, in Caldas da Rainha

Creative education lab of the Óbido´s Technology Park

**Training providers**

The Teachers Training Center: CFAE- Centro-Oeste, with the collaboration of the Articademy.

**Certification**

The Teachers Training Center: CFAE- Centro-Oeste will give a Europass Mobility certificate at the end of the course.

**Training Places:**

The course will have training sessions,distribute mainly for two cities. The two days will be in Almada and then we will move to Caldas da Rainha.

Almada, at theFaculty of Sciences and Technology (FCT NOVA) campus, in Caparica, at 15 minutes from Lisbon and 5 minutes from the beaches). See how to get there in <http://www.fct.unl.pt/en/about-fct/how-get-fct>

Caldas da Rainha, it is 1hour by bus from Lisbon, with buses leaving every hour, at least. See more information about the city in <https://en.gocaldas.com/>

**Follow-up**

We would like that after the course the participants think about the knowledge that they developed there and then try to disseminate it in their home schools and apply it in their classrooms. Also, we would like for them to keep the contact with each other and collaborate to find educational solutions together.

Therefore, applying the open source logic, we will create output groups/ forums inviting the participants to share their ideas, opinions and experiences with the Gyro community.

**Cultural activities**

Guided tours in the old Almada city and to the main cultural centers of the Caldas da Rainha city

We will organize more cultural activities. However, they will not be included in the course price and they are optional.

**Price:**

430€

**Logistic**

The price only includes the course fee, the coffee breaks and the travels to visit the FabLab of Lisbon, depart from Almada and to visit the Creative education lab of the Óbido´s Technology Park, depart from Caldas da Raínha.

Accommodation, farewell dinner, and other meals are not included in the price, neither other travel cost between places of training and of visits. However, we can give you advices about how to find a suitable accommodation and transportation.

**Duration**

5 days

**Number of participants**

15

**Aims:**

Fight the fear and resistance of the use of the use of technology in the classroom.

Show the teachers that they can improve the student’s education and creativity using the learn by doing methodology and newtechnologies.

Give to know the Gyro. It is an open source platform, where everyone can use its resources, develop new tools and share it with the community.

Stimulate the teachers to find solutions to improve the implementation of Digital competences in the Europe, starting with their school.

Stimulate the network creation inside the education community.

**Program**

*Day 0*

Arriving

**Day 1**

(*Almada*)

*Morning:*

Welcome

The challenges of use of technology in the classroom.

Introducing Gyro as an education tool

*Afternoon:*

Gyro as an education tool

**Day 2**

*(Almada)*

*Morning*

Visiting the FabLab of FCT NOVA

* The maker movement
* The Fablab movement

Afternoon:

(Lisbon- we will cross the river by boat, after lunch)

Visiting the FabLab of Lisbon

**Day 3**

Morning

Travel to Caldas da Rainha

Afternoon:

(Caldas da Rainha)

Visiting the Teachers Training Center: CFAE- Centro-Oeste, and its classroom of the future.

* Classroom of the future
* Turning hassle-free the use of technology in the classroom

**Day 4**

Morning

(Caldas da Rainha)

Introducing the “eTwinning” tool

Network creation

Afternoon:

(Óbidos)

Travel to Óbidos

Visiting and introducing of the My machine project, in the Creative education lab of the Óbido´s Technology Park

**Day 5**

(Caldas da Rainha)

Morning:

The implementation of Digital competences in the Europe

Afternoon:

Conclusions

Course evaluation by the participants

Evening:

Farewell dinner

**Website:**

(We will give the link soon)

**Sessions**

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|  |  | Register before |
| 2017: | | |
| July | 10.07.2017 > 14.07.2017 | 10.05.2017 |
| September | 04.09.2017 > 08.09.2017 | 04.07.2017 |
| November | 20.11.2017 > 24.11.2017 | 20.09.2017 |
| 2018 | | |
| February | 26.02.2018 > 02.03.2018 | 22.12.2017 |
| May | 21.05.2018 > 25.05.2018 | 21.03.2018 |
| July | 09.07.2018 > 13.07.2018 | 09.05.2018 |
| September | 10.09.2018 > 14.09.2018 | 10.07.2018 |
| October | 22.10.2018 > 26.10.2018 | 22.08.2016 |