## Azione chiave 2 – Cooperazione per l'innovazione e le buone pratiche



### PROGETTO ERASMUS PLUS

Il nostro Istituto ha ottenuto il finanziamento per un progetto Erasmus +, LOST IN SPACE della durata di due anni (2018/19, 2019/20).

Il progetto si concentra su astronomia, scienze e matematica. Lo scopo è di migliorare le competenze linguistiche, favorendo il contatto diretto tra individui di differenti nazionalità. Gli obiettivi del progetto sono di aiutare a promuovere o consolidare l'interesse degli studenti e la partecipazione alle materie STEM. L'astronomia sarà l'affascinante veicolo per il raggiungimento di tale obiettivo. I paesi partecipanti al progetto sono: Inghilterra, Spagna, Francia, Croazia, Grecia e Italia. Alcuni nostri insegnanti si recheranno in Grecia (Atene), Francia (Montpellier) e Croazia (Parenzo) a Denia (Spagna) e in Inghilterra a Barnard Castle.

**MEETINGS** 

**Meeting Dates** 

Meeting 1 Greece 18th March to 22nd March 2019

Meeting 2 France 13th May to 17th May 2019

Meeting 3 Croatia 29th Sept to 4th October 2019

Meeting 4 Spain 26th January to 31st January 2020

Meeting 5 Italy 30th March to 3 April 2020 (postponed)

Meeting 6 UK 11th May to 15th May 2020 (postponed)

### MINUTES OF MEETING IN ENGLAND STAFF TRAINING EVENT

Present Ian Kell Teesdale School and Sixth Form Centre

MOREAU Nicolas College Vincent Badie

SINEIRO Frédéric College Vincent Badie

PATRICIA EXPÓSITO GOMIS Paidos

MARTÍ XIFRE Paidos

APOSTOLIDOU ANTHI 2nd Gymnasium of Nea Ionia Attikis

FRAGKOGIANNI EFSTATHIA 2nd Gymnasium of Nea Ionia Attikis

TATJANA GULIC PISAREVIC Turisticko ugostiteljska Skola Antona Stifanica Porec

LJILJANA BADROV FRLETA Turisticko ugostiteljska Skola Antona Stifanica Porec

VALERIA MARIA FANTINO IC Centro Storico Moncalieri

LUISELLA MORIONDO IC Centro Storico Moncalieri

FEDERICO MARINACCIO IC Centro Storico Moncalieri

E Twinning It was agreed that we should try and ensure all students are registered on E Twinning, so they can interact before and after meetings.

[gallery ids="4870,4872,4873,4874,4875,4876,4877,4878,4882"]

### LOGO COMPETITION RULES

Each school would submit 1 Logo. The decision as to which Logo to Submitis up to Individual schools

The Format of the Logo is at the discretion of the creator. It could be computer generated or traditional artwork. As long as it is original.

The Logo should be finished by December 7th and the voting will take place on December 14th

The finalists will have their logo saved in a gallery. Schools can not vote for their own Logo, but will award a mark between 1 and 5 (5 for their favourite....1 for their least favourite) the Logo with the most marks being chosen. (1 school ...1 Vote) the voting formwill be uploaded in google docs

There was a suggestion that some collaborative task should be initiated as a starter activity. If possible a skype challenge could allow students to meet each other on a face to face basis. Rules for the Skype challenge are covered below. It was felt though that some partners would struggle to participate but all partners were to consider some collaborative task.

The project is an inter generational project and we agreed to extend participation in the project not just toolder audience, but to include younger students. The twin space should include 5 year olds as well even if they are not involved in the Erasmus partnership.

Juan de Comenius, IC Centro Storico Moncalieri and Paidos would include a section for 4 and 5 year olds

[gallery columns="4" size="large" ids="4871,4870,4869,4868,4867,4866,4865,4864"]

### **MEETINGS**

The Italian School are currently not scheduled to host a meeting. The reasons for this are well known in the partnerships and the Italian partners are entirely blameless. However, they are now, not only able to host but very eager to do so. IK has contacted the NA to investigate whether it is possible to ensure a meeting in Italy.

**Meeting Dates** 

Meeting 1 Greece 18th March to 22nd March 2019

Meeting 2 France 13th May to 17th May 2019

Meeting 3 Croatia 30th Sept to 4th October 2019

Meeting 4 Spain 20th January to 24th January 2020

Meeting 5 Italy 30th March to 3 April (this is to be confirmed)

Meeting 6 UK 11th May to 15th May 2020

### WHAT TO DO

Meeting 1 Students will present their school for 5 minutes

Students will deliver a presentation on an astronomer or scientist from their own country.

NOTE the presentation does not need to be a ppt, it could be presented via a song, or a play or a film. Language is not restricted to English, but do ensure that whatever language you use..it is accessible to all students.

Although Science and astronomy were to underpin all meetings, students must have the opportunity to meet each other on a social basis.

All partners agreed that how we select the students should be left to the professional judgement of the partners, but we should consider behaviour.

Host schools were responsible for ensuring the host families were safe.

Prior to visits, host schools should prepare a budget which is shared to partners to make it clear what they would spend.

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### DISSEMINATION

All partners were invited to participate in Joomag for the creation of magazines

The croatian partners would look after app inventor tocreate an app to display outputs

The Greek and French partners would help manage the twin space

The British partner would create a web site

The Spanish partner would manage the google drive

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### TRAINING MATERIALS

A bit of basic astronomy & deep sky photography

Roger Pittock, 9th November 2018

**FACTS & DEFINITIONS** 

Stellar and solar motion

Magnitude – the brightness of our sky

What is deep sky? An example

#### Solar and stellar motion

Sun circles E-W (ecliptic) Exactly 1 rev in 24 h – our day.

Polaris "doesn't move". Stars – and deep sky objects encircle Polaris

Approx 1 rev in 23h 56 min

Gain of 4 min per day 2 hours per month ½ day per six months Back to square one each year

### **Facts & Definitions**

Stellar and solar motion

Magnitude – the brightness of our sky

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## Magnitude

Magnitude is a logarithmic scale of brightness. Five magnitudes represents a factor of 100. Each magnitude is a factor of approx 2.512

Increasing number represents reducing brightness. Reference is Vega – magnitude zero. Magnitude takes area into account

[gallery columns="2" size="full" ids="4808,4809"]

## What do we mean by "Deep sky"?

Orion nebula. Naked eye. Binoculars. Telescope. Photo through telescope

Grecia - marzo 2019

### A week in Greece

Teachers traveling from Nino Costa - IC Centro Storico Moncalieri:

Susanna Dal Rio, Luisella Moriondo, Laura Verardi

Monday	Tuesday	Wednesday	Thursday	Friday
March 18, 2019	March 19, 2019	March 20, 2019	March 21, 2019	March 22, 2019
09:00 - 09:30 Welcome of the pedagogical teams in the school's events hall	8:30- 10:00Workshop "The Solar System"	8:15 Meeting at school	8:15 Meeting at school	08:30 Meeting at school

09:30- 10:00Conducted tour of the guests in our school	10:00- 11:30Workshop "Sundial"	9:00-10:00 Visit to the Museum of Ancient Greek Technology	09:00 – 11:00 Visit to the Museum of Meteorites	09:00 -11:00 End of the educational meeting work. Distribution of participation certificates to students and teachers 11:15- 14:00 Participation of the students in the educational activity "Life in Universe" in the Planetarium of Evgenidio Foundation
10:00- 11:00 Acquaintance activities for the members of the pedagogical teams		11:00 – 12:00 Guided tour of the Ancient Agora of Athens		
11:00- 11:30Coffee/Juice break	11:30- 12:00Coffee/Juice break	12:00 – 13:00 Sightseeing in Athens.	11:30 – 12:00 Coffee/Juice break	
11:30-12:00 "Girls in Science" Presentation (ESA – OdysseusII Contest)	12:00- 14:15Presentations of the activities conducted so far	13:00 Return to school	12:00 – 13:30 Workshop: "The Eratosthenes' Experiment"	14:15 Departure of students from school. Lunch with the host families
12:00- 14:15Students presentations (My school, my country & Astronomy in my country)				
14:15 Departure of students from	14:15 Departure of students from	13:30 Departure of students from	13:30 Departure of students from	

14:30 Lunch for teachers

the host families

the host families

school. Lunch with school. Lunch with school. Lunch

the host families

with the host

families

The afternoon activities of the guest students will families

The afternoon activities of the guest students will be organized by the be organized by the families

17:30-20:00 Participation of the students in the educational activity "Music workshop on the planets", which will be carried out in the school's events hall

The afternoon activities of the guest students will be organized by the families

19:00-21:30 "Greek night": farewell celebration with music, dancing and food in the school's events hall with the participation of students, teachers and parents

Francia - maggio 2019

Program of the meeting

Teachers traveling from Nino Costa - IC Centro Storico Moncalieri:

Enrico Borgni, Valeria Maria Fantino (Head Mistress)

On Sunday 12th May, the French team welcomed all the delegations.

Monday 13th May: College Vincent Badie and visit of Montpellier

Morning: Students will be at the school with their hosts at 8:30.

8:30 - 10:20 Welcome by the school management.

Foreign students attend courses with their correspondents.

10:40 - 11:15: Visit of the school for the teachers by french ambassadors.

**11:15:** Departure from the school by bus.

12:00: Lunch in Montpellier, picnic on the « Promenade du Peyrou » until 12:45.

Après-midi:

13:00 - 15:00 : Visit of Montpellier : Rally photo

**15:00 - 16:15 :**Free time in Montpellier

Arrival time at Montarnaud around 17:00.

**Evening**: Students : Dinner with family

On Monday 13<sup>th</sup>May, while the pedagogic team were welcomed by the school management, all foreign students attended two courses with their correspondents. One of the courses allowed all students to discuss traditional prejudices and European customs. Then, teachers were guided to visit the school by french students ambassadors.

In the afternoon, students and teachers, mixed in groups, did a rally photo in Montpellier. They could discover different monuments including observatory and sundials.



Errore. Il nome file non è specificato.

## Tuesday 14th May: Aigues-Mortes and La Petite Camargue

Morning: Students will be at the school with their hosts at 8:30.

**8:30:** Departure from the school by bus for « La Petite Camargue".

10:30: Visit of the "Salins du Midi" with a little train

Lunch: Restaurant or picnic for teachers and picnic for students in Aigues-Mortes.

### Afternoon:

13:30: Visit of the towers and ramparts of Aigues-Mortes. Free time.

Arrival time at Montarnaud around 17:00.

**Evening**: Dinner with family

**Errore. Il nome file non è specificato.**On Tuesday 14<sup>th</sup>May, the day was devoted to cultural visits: Aigues-Mortes (the towers and ramparts) and "Salins du Midi" with a little train.



## Wednesday 15th May: College Vincent Badie

Morning: Students will be at the school with their hosts at 8:30.

Activities at school:

**8:35 - 11:30:** Workshops for students : Construction of a 3D model of a constellation.

11:30 - 12:35: Each country present their own work about LISP project.

12:35: Students: Departure of students from school. Lunch with the host families.

## Afternoon:

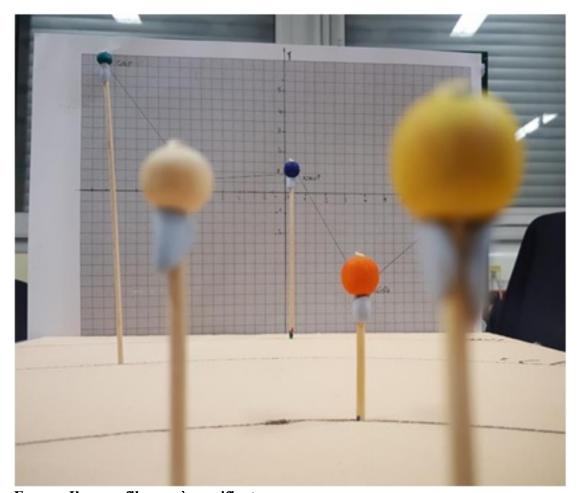
The afternoon activities of the guest students will be organized by the families.

Teachers: Free time in Montpellier

## **Evening**:

## 19:30 - 22:00: Dinner with all students and teachers at Mas Dieu Village.

On Wednesday 15<sup>th</sup>May, students attends several workshops:Construction of a 3D model of Cassiopee constellation, and representation of the solar system at the scale. (the Sun was represented by a soccer ball, and the last planet, Neptun, represented by a very small ball, was 900 m far away the Sun).



Errore. Il nome file non è specificato.

Then each country presented their own work about LISP project.



Errore. Il nome file non è specificato.

On the afternoon, activities of the guest students will be organized by the families.

And then, students and teachers gathered at Mas Dieu Village for a beautiful evening of friendship and conviviality.



Thursday 16<sup>th</sup> May: Toulouse : Cité de l'Espace

# All the day:

**6:00:**Departure from the school by bus.

10:00 - 17:00. Visit of "Cité de l'Espace"

Students : Lunch in "Cité de l'Espace".

Teachers: Lunch at Restaurant in "Cité de l'Espace" or picnic (TBD)

Arrival time at Montarnaud around 21:00.

**Evening**: Students: Dinner with family

On Thursday 16th May, all the delegations visited the "Cité de l'Espace" in Toulouse.



Friday 17th May: Visit of a typical village

Morning:

**8:30.**Students: departure from the school by bus.

**9:30.**Visit of the "Clamouse" cave (2 groups)

12:00. Students: Lunch with a picnic in Saint-Guilhem-le-Désert.

Teachers: Lunch at Restaurant in St-Guilhem or picnic (TBD)

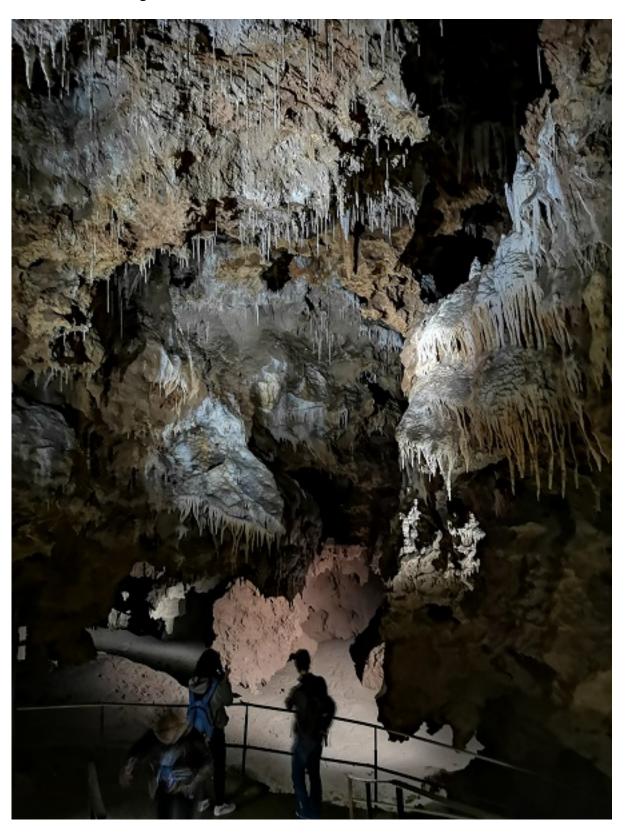
Visit of Saint-Guilhem-le-Désert with The Abbey of Gellone, listed as UNESCO World Heritage "Jewel of the first Languedoc Romanesque art". Treasure hunt: Desperatelly looking for shells and sundial.

Free time

Arrival time at Montarnaud around 16:00.

On Friday 17<sup>th</sup> May, the morning was devoted to visit the "Clamouse" cave and a typical village Saint-Guilhem-le-Désert where the students did a Treasure hunt: "Desperatelly looking for

shells and sundial". On the afternoon, while students had free time with their hosts, teachers had a coordinators meeting at school.



In the evening, a Farewell Party was organized with music, dancing and food in the village hall of Argelliers with the participation of students, teachers and parents.

A Sky observation with telescope was planned but the rain forced us to cancel.



20:00 – 24:00. Sky observation with telescope.

Farewell Party with music, dancing and food in the village hall of Argelliers "Salle Vert Paradis" with the participation of students, teachers and parents.

Local speciality: "Brasucade" (grilled mussels on a wood fire)

# Saturday 18th May: Departure of the delegations.

On Saturday 18th May, all the delegations left Montarnaud



# Croazia ottobre 2019

# Project Meeting in Porec, Croatia 29.09.2019-05.10.2019

Teachers traveling from Nino Costa - IC Centro Storico Moncalieri:

Susanna Dal Rio, Luisella Moriondo, Masin Roberta (Primary School Massimo d'Azeglio)

Guest Teachers	9
Guest Students	31
TOTAL Number of Guests	40
Host Students	20
Host teachers	4
TOTAL number of participants	64

## **Saturday/Sunday 28./29.9.2019**

Individual arrival of the project meeting participants at the Hotel Porec (teachers and students).

Host students will wait for their student guests at the Hotel Porec reception.

### Monday 30.9.2019

10:00 Welcome ceremony- conference room at Obrtnički dom Poreč (Craftsmen Centre Porec)

10:00-10:15 Welcome Speech- Vesna Baranasic, Principal

Welcome Speech- Tatjana Gulic Pisarevic- School project coordinator

10:15-10:30 Presentation of the Region Istria- The heart of tourism of Croatia+ film about Istria – (Tatjana Gulic Pisarevic)

10:30-10:45 Presentation of the School System in Croatia (Danijela Banko)

10:45-11:00 Students Music performance

11:00-11:30 Coffee break

11:30-13:00 Ice Breaking activities

13:00-14:00 Lunch at Artigiano restaurant (teachers)

14:30 Departure to Visnjan Observatory

15:00-19:00 Workshop I Astrobiology at Observatory (G1 11 students)

15:00-19:00 Workshop II Physics I at Observatory (G2 12 students)

15:00-19:00 Workshop III Physics II at Observatory (G3 11 students)

14:30-16:30 City Sightseeing- visit of the Euphrasian Basilica (teachers who are not attending workshops in Visnjan)- after the city sightseeing teachers have free time

16:30 Teachers' free afternoon and evening

19:00 Departure from Visnjan to Porec (students and teachers who participated at workshops at Observatory)

19:15 Host parents pick up students at the school parking

### **Tuesday 01.10.2019**

8:30 Meeting at school

8:30-9:30 Presentation of our school and tour of the school

9:30-10:30 Students - Workshop at school- App Inventor

9:15-10:00 Coordinators'/Teachers' project meeting

10:00-10:30 eTwinning and Erasmus+ Lost in Space LISP (Tatjana Gulic PIsarevic)

10:30-11:00 Coffee Break at school

11:00-12:30 Students' presentation of the project activities in-between the meetings

Students' presentation of the App Inventor game

12:30- 14:00 Lunch at school

14:30 Departure to Visnjan Observatory for those students who will participate to the workshops at the Observatory

15:00-19:00 Workshop I Astrobiology at the Observatory (G3 11 students)

Workshop II Physics 1 at the Observatory (G1 11 students)

Workshop III Physics 2 at the Observatory (G2 12 students)

14:00 Departure to Vrsar for teachers who are not participating to workshops at Observatory in Visnjan

14:00-17:00 Visit of Vrsar

17:00 Departure to Porec

17:30-18:30 Free time

18:30 Departure from Porec to Visnjan (from the school parking-for those students and teachers who didn't participate to workshops at the Observatory in Visnjan)

19:00-20:30 Picnic dinner in front of the Observatory

20:30-22:00 Guided tour of the Višnjan Observatory - Tičan and observations of the night sky with

amateur telescope (all students and teachers)

22:00 Departure from the Observatory in Visnjan to Porec

22:15 Host parents pick up students at the school parking

Wednesday 02.10.2019

8:30 Departure from Porec (Meeting point: school parking) to Visnjan (those students who attend workshops at Observatory in Visnjan will go to Visnjan, the others to The Institute of Agriculture and Tourism in Porec)

9:00-13:00 Workshop I Astrobiology 1 at the Observatory (G2 12 students)

Workshop II Physics 1 at Observatory (G3 11 students)

Workshop III Physics 2 at Observatory (G1 11 students)

9:00-11:00 Workshop at the Institute of Agriculture and Tourism- 2 groups of 12 students and teachers (those students and teachers who will not participate at workshops at the Visnjan Observatory)

11:30-12:30 Guest teachers host school classes

12:45 Departure to Rovinj (from the school parking via Visnjan)

13:00 Bus coming from Porec picks up students and teachers at the Observatory of Visnjan

13:30-14:30 Picnic at Lim Fjord

14:30 Departure to Rovinj

15:00-17:00 Lecture at the Maritime Institute of Rudjer Boskovic of Rovinj and visit of the aquarium

17:00-19:00 Sightseeing of Rovini

19:00 Departure to Porec

19:45 Arrival at school parking of Porec- parents pick up students at the school parking

### **Thursday 03.10.2019**

09:00 Departure to Motovun (from the school parking)

10:00-12:00 Visit of Motovun

12:00 Departure from Motovun to Baredine Cave near Porec

13:00-14:00 Picnic lunch on the meadow in front of the Baredine Cave

14:00-16:00 Visit of Baredine Cave

16:00-18:00 Students' open games (football, volleyball, frisbi)

18:15 Parents pick up students at the school parking

## Friday 04.10.2019

8:30-10:00 Meeting point- Obrtnicki dom Porec- Students' Preparation of Final presentations about what they learned during the project meeting in Porec (with intercultural elements-differences and similarities between guest and host country)

10:00-10:30 Coffee Break

10:30-11:00 Presentation of the use of geothermal energy in the Hotel Laguna Parentium

11:00-12:00 Students present their Intercultural Presentations (divided in groups)

12:00-12:30 Press, interviews,...

12:30-13:00 Teachers' lunch

Free afternoon

18.30 Bus departure from the school parking (students and teachers)

19.00 Farewell dinner at Hotel Maestral Novigrad

## **Saturday 05.10.2019**

Guest students' and teachers' departure

# PROGRAM DÉNIA, SPAIN 26/01/2020 - 01/02/2020

### "LOST IN SPACE"

## **Sunday 26/01**

Arrival of the partners at different hours at Paidos School. Host families will wait there.

## **Monday 27/01**

Arrival at Paidos School and Welcome ceremony.

Coffee Break.

Visit to the school premises and lunch at the school.

Walking to Dénia's Castle from Paidos.

Guided tour at Dénia's Castle.

Visit to Dénia's fish market.

Back with host families.

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## **Tuesday**, 28/01

Arrival at Paidos School. Ice breaking activities.

Workshop "Lost in Space board game intro".

Presentation "Art and science"

Coffee Break

Visit to Dénia's Town Hall.

Lunch at the school.

Workshop "Lost in Space board game 1".

Back with host families.

Observation and lecture in Paidos by Costa Blanca Astronomical Society and informal tapas dinner (typical cocas) at school.

[gallery size="large" ids="4839,4840,4841"]

# Wednesday 29/01

Meeting point at the school.

Visit to "La Ciutat de les Arts i les Ciències" (Valencia)

Hemisfèric (Valencia) – Screening of "Apollo11"

Picnic lunch.

Free time in Valencia.

Host families will pick up the students at the school.

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### Thursday 30/01

Workshop "Lost in Space board game 2" (with Coffee break).

Lunch at the school.

Solidarity Run by Save the Children at the school.

Back with host families

# **Friday 31/01**

Workshop "Lost in Space board game 3"

Coffee break.

Presentation of the board games.

Lunch at school.

Gymkana for all the participants.

Back with host families.

Farewell dinner and Certificates: "Real Club Náutico de Dénia"

## Saturday 01/02

Departure of all guests' students and teachers to their countries.