Erasmus+: "A Project on Sustainability: Think global, act local!" Activities of IISS EINAUDI CASAREGIS GALILEI

GALILEO GALILEI TECHNICAL HIGH SCHOOL, GENOA, ITALY

Phase I: **2017/2018**

Month	Aims	Results	Done
September	- Presenting the project and sharing	- Presenting the project and sharing	YES
2017	the tasks among students and	the tasks among students and	
	teachers according to competences.	teachers according to competences.	
	- Studying the structure of the solar	- Studying the structure of the solar	YES
	tracker.	tracker.	
	- Identifying the material needed for	- Identifying the material needed for	YES
	the solar tracker.	the solar tracker.	
October	- Presenting the students involved in	- Presenting the students involved in	YES
2017	the project according to work	the project according to work	
	groups:	groups:	
	III AEN (energy course,	III AEN (energy course,	
	scientific group);	scientific group);	
	V AEN (energy course,	V AEN (energy course,	
	technical group);	technical group);	
	II AMM (mechatronic course,	II AMM (mechatronic course,	
	art and graphic design	art and graphic design	
	group).	group).	
	- Presenting the teachers involved in	- Presenting the teachers involved in	YES
	the project.	the project.	
	- Designing the solar tracker.	- Designing the solar tracker.	YES
November	- Presenting the school: a	- Presenting the school: a	YES
2017	distribution of the main topics to	distribution of the main topics to	
	deal with, according to groups and	deal with, according to groups and	
	collecting the first material	collecting the first material	
	produced.	produced.	
	- Drawing the main components of	- Drawing the main components of	YES
	the solar tracker.	the solar tracker.	
	- Selecting the students for the	- Selecting the students for the	YES
	mobility in Greece (written and oral	mobility in Greece (written and oral	
	tests) and preparing all the	tests) and preparing all the	
	necessary documentation for the	necessary documentation for the	
	families and the school	families and the school	
	administration.	administration.	
December	- Presenting the school: getting the	- Presenting the school: getting the	YES
2017	material ready and posting the	material ready and posting the	
	presentation of Galileo Galilei	presentation of Galileo Galilei	

	1		
	Technical High School on eTwinning.	Technical High School on eTwinning.	
	- Choosing the main components for	- Choosing the main components for	YES
	the solar tracker.	the solar tracker.	
	- Using the 3D printer.	- Using the 3D printer.	YES
	- Designing the logo of the project: a	- Designing the logo of the project: a	YES
	distribution of tasks according to	distribution of tasks according to	
	work groups.	work groups.	
January	- Designing the logo of the project:	- Designing the logo of the project:	YES
2018	from hand drafts to CAD work	from hand drafts to CAD work	
	sheets. Final result.	sheets. Final result.	
	- Statistics:	- Statistics:	YES
	studying the interrelation of	studying the interrelation of	
	data on green energy;	data on green energy;	
	analysis of linear functions	analysis of linear functions	
	depending on data on green	depending on data on green	
	energy;	energy;	
	analysis of central position	analysis of central position	
	markers.	markers.	
	- Natural disasters in Liguria by some	- Natural disasters in Liguria by some	YES
	researches on the local damages on	researches on the local damages on	. 23
	the environment. In particular:	the environment. In particular:	
	♣ ACNA's pollution of soils and	♣ ACNA's pollution of soils and	
	waters in Cengio;	waters in Cengio;	
	the shipwreck of the MT	the shipwreck of the MT	
	Haven;	Haven;	
	the park of Nervi's	the park of Nervi's	
	destruction by a tornado and	destruction by a tornado and	
	its remediation;	its remediation;	
	the harmful effects of the	the harmful effects of the	
	toxic algae on the Ligurian		
		toxic algae on the Ligurian	
	Sea;	Sea;	
	the coastal erosion of our	the coastal erosion of our	
	beaches.	beaches.	VEC
	- Building the structure of the solar	- Building the structure of the solar	YES
	tracker.	tracker.	VEC
February	- First ideas of comics on a green	- First ideas of comics on a green	YES
2018	hero. Drafts and hand drawings.	hero. Drafts and hand drawings.	VEC
	- Statistics:	- Statistics:	YES
	analysis of markers on variety	analysis of markers on variety	
	of data about green energy;	of data about green energy;	
	distribution of the frequency	distribution of the frequency	
	of data according to Gauss	of data according to Gauss	
	function;	function;	
	practical application of all the	practical application of all the	
	data collected.	data collected.	
	- Natural disasters in Liguria: a	- Natural disasters in Liguria: a	
	presentation in PowerPoint about	presentation in PowerPoint about	YES
1	the main local damages on the	the main local damages on the	

	· .		
	environment.	environment.	
	- Inventing quizzes, crosswords, and	- Inventing quizzes, crosswords, and	
	logic games for activities to be done	logic games for activities to be done	YES
	in Amaliada with all the students	in Amaliada with all the students	
	together, by using Scratch and the	together, by using Scratch and the	
	creation of a videogame on green	creation of a videogame on green	
	energy.	energy.	
	- Building the structure of the solar	- Building the structure of the solar	
	tracker.	tracker.	YES
	- Press release about the project.	- Press release about the project.	
	Tress release about the project.	Tress release about the project.	YES
D. 4 I-	Calland's a the Control of the Control	Calleation that Control of the Lands of the Lands	
March	- Collecting the first technical reports	- Collecting the first technical reports	YES
2018	on sustainability and energy sources,	on sustainability and energy sources,	
	with a focus on tidal energy, and	with a focus on tidal energy, and	
	subsequent posting on eTwinning.	subsequent posting on eTwinning.	
	- Presenting a research about wind	- Presenting a research about wind	YES
	farms (listing the main sites in	farms (listing the main sites in	
	Liguria) and wind turbines in Liguria	Liguria) and wind turbines in Liguria	
	(consumption and data analysis of	(consumption and data analysis of	
	25 stations in our region).	25 stations in our region).	
	- Presentinga study on the	- Presentinga study on the	YES
	consumption of electric energy in	consumption of electric energy in	
	Italy from 2000 to 2017, and of	Italy from 2000 to 2017, and of	
	1	•	
	renewable energy in Italy from 2016	renewable energy in Italy from 2016	
	to 2017.	to 2017.	
	- Meeting with the families of	- Meeting with the families of	YES
	students involved in the mobility to	students involved in the mobility to	
	Greece and collecting the last details	Greece and collecting the last details	
	about the trip (authorizations from	about the trip (authorizations from	
	the school administration).	the school administration).	
April	- Summarizing the work done by	- Summarizing the work done by	YES
2018	students by preparing presentations	students by preparing presentations	
	in PowerPoint to be shown in	in PowerPoint to be shown in	
	Greece.	Greece.	
	- Mobility to Amaliada.	- Mobility to Amaliada.	YES
May	- Debriefing of the mobility	- Debriefing of the mobility	YES
2018	experience by meetings with	experience by meetings with	0
2010	teachers and principal.	teachers and principal.	
	- First ideas about the organizational		YES
		- Drafts about the organizational	163
	meeting in Genoa, October 2018.	meeting in Genoa, October 2018.	
June	- Feedback of the first phase of the	- Feedback of the first phase of the	YES
2018	project	project	
July	- "European Schools Go Green!"	- "European Schools Go Green!"	YES
2018	Art Magazine 2018	Art Magazine 2018	
	- "European Schools Go Green!"	- "European Schools Go Green!"	YES
	Erasmus Plus 1st Magazine 2018	Erasmus Plus 1st Magazine 2018	
	- Sharing the results	- Sharing the results	YES
	O		

Phase II: **2018/2019**

Month	Aims	Results	Done
September	- Meeting with principal and staff to	- Meeting with principal and staff to	YES
2018	present the second phase of the	present the second phase of the	
	project and share the tasks among	project and share the tasks among	
	students and teachers according to	students and teachers according to	
	competences.	competences.	
	- Preparation of the project meeting	- Preparation of the project meeting	YES
	to be held in Genoa in October 2019.	to be held in Genoa in October 2019.	
	- Organization of the week plan.	- Organization of the week plan.	YES
	- Preparation of the invitations for	- Preparation of the invitations for	YES
	the German and Greek delegations.	the German and Greek delegations.	
	- Sending the corresponding	- Sending the corresponding	YES
	documents to the German and	documents to the German and	
	Greek delegations.	Greek delegations.	
October	- Presenting the students involved in	- Presenting the students involved in	YES
2018	the project according to work teams:	the project according to work teams:	
	IV AEN (energy course);	IV AEN (energy course);	
	I AMM (mechatronic course).	♣ I AMM (mechatronic course).	
	- Welcoming the teachers from	- Welcoming the teachers from	YES
	Kassel and Amaliada for the second	Kassel and Amaliada for the second	
	project meeting in Genoa.	project meeting in Genoa.	
	- Guided tour of the structures and	- Guided tour of the structures and	YES
	laboratories of the school.	laboratories of the school.	
	- Feeding back about the work done	- Feeding back about the work done	YES
	during the first phase of the project.	during the first phase of the project.	
	- Brainstorming and setting the next	- Brainstorming and setting the next	YES
	steps of the projects according to	steps of the projects according to	
	the second phase.	the second phase.	
	- Guided tour of Camogli, in the	- Guided tour of Camogli, in the	YES
	Eastern Riviera.	Eastern Riviera.	
	- Preparation and distribution of the	- Preparation and distribution of the	YES
	certificates of attendance to	certificates of attendance to	
	partners.	partners.	
November	- Presenting the work schedule to	- Presenting the work schedule to	YES
2018	the principal and the staff at school.	the principal and the staff at school.	
	- Distribution of tasks to deal with,	- Distribution of tasks to deal with,	YES
	according to groups and topics.	according to groups and topics.	
	- Organizing the first meetings with	- Organizing the first meetings with	YES
	hosting families and collecting the	hosting families and collecting the	
	forms filled by parents.	forms filled by parents.	
	- Setting the activities:	- Setting the activities:	YES
	scientists interviews,	scientists interviews,	
	science magazine,	science magazine,	
	🖶 Arduino projects,	4 Arduino projects,	

	- Countab cathritica	Canatala astinitias	
	♣ Scratch activities,	♣ Scratch activities,	
	chemistry experiments,	definition control to the chemistry experiments,	
	♣ model of the school with an	♣ model of the school with an	
	analysis of heat transfers,	analysis of heat transfers,	
	the solar tracker design and	the solar tracker design and	
	implementation.	implementation.	
December	- Subscribing new students on the	- Subscribing new students on the	YES
2018	eTwinning platform.	eTwinning platform.	
	- Teleconference on Twinspace to	- Teleconference on Twinspace to	YES
	present students and teachers to	present students and teachers to	
	partners.	partners.	
	- Designing the model of the school	- Designing the model of the school	YES
	for heat exchange with Inventor.	for heat exchange with Inventor.	
	- Designing a new prototype of the	- Designing a new prototype of the	YES
	solar tracker.	solar tracker.	
	- Studying the solar system for the	- Studying the solar system for the	YES
	interview with the manager of the	interview with the manager of the	
	astronomical observatory.	astronomical observatory.	
	- First contacts with external	- First contacts with external	YES
	partners for the incoming mobility.	partners for the incoming mobility.	
	- Promotion and dissemination of	- Promotion and dissemination of	YES
	the project:	the project:	
	preparing a presentation of	preparing a presentation of	
	the project to be shown at	the project to be shown at	
	the event organized by the	the event organized by the	
	municipality "What's up	municipality "What's up	
	Genoa",	Genoa",	
	participating in the event	participating in the event	
	"What's up Genoa",	"What's up Genoa",	
	♣ article on "La Repubblica"	article on "La Repubblica"	
	about the project,	about the project,	
	participating in the event for	participating in the event for	
	schools projects organized at	schools projects organized at	
	Informa Giovani, Palazzo	Informa Giovani, Palazzo	
	Ducale, Genoa.	Ducale, Genoa.	
	- Mobility Tool: editing the first draft	- Mobility Tool: editing the first draft	YES
	of the Interim Report for the	of the Interim Report for the	123
	·		
	national agency.	national agency.	

January	- Eratosthenes experiment:	- Eratosthenes experiment:	YES
2019	accepting the proposal by the Greek	accepting the proposal by the Greek	TES
2013	school and first planning about it.	school and first planning about it.	
	- Setting activities with external	- Setting activities with external	YES
	partners for the incoming mobility:	partners for the incoming mobility:	0
	♣ ABB Information Systems,	♣ ABB Information Systems,	
	♣ IIS Italian Institute Of Welding,	IIS Italian Institute Of Welding,	
	4 Aquarium Of Genoa,	4 Aquarium Of Genoa,	
	Paper Museum Of Mele, Genoa,	Paper Museum Of Mele, Genoa,	
	PESEA Park Of Coronata, Genoa,	PESEA Park Of Coronata, Genoa,	
	4 IIT - Italian Institute Of	🖶 IIT - Italian Institute Of	
	Technology.	Technology.	
	- Collecting students data for the	- Collecting students data for the	YES
	hosting of German and Greek	hosting of German and Greek	
	students.	students.	
	- Planning interviews with scientists.	- Planning interviews with scientists.	YES
	- Arduino and robotics at a basic	- Arduino and robotics at a basic	YES
	level: first descriptive documents.	level: first descriptive documents.	
	- Building the frame of the model of	- Building the frame of the model of	YES
	the school for heat exchange	the school for heat exchange	
	analysis.	analysis.	
	- Building the structure of a new	- Building the structure of a new	YES
	prototype of the solar tracker.	prototype of the solar tracker.	
	- Mobility Tool: completing the draft	- Mobility Tool: completing the draft	YES
	of the Interim Report for the	of the Interim Report for the	
	national agency and sending it.	national agency and sending it.	
February	- Meeting with principal and staff on	- Meeting with principal and staff on	YES
2019	the final planning of the incoming	the final planning of the incoming	
	mobility and relative approval.	mobility and relative approval.	
	- Sending the invitations and the	- Sending the invitations and the	YES
	week plan to the German and Greek	week plan to the German and Greek	
	delegations for the second	delegations for the second	
	transnational mobility in Genoa.	transnational mobility in Genoa.	
	- Preparing activities with Scratch	- Preparing activities with Scratch	YES
	(quizzes and logic games) to be	(quizzes and logic games) to be	
	presented to students in April.	presented to students in April.	
	- Matching hosting Italian students	- Matching hosting Italian students	YES
	with the Greeks for the incoming	with the Greeks for the incoming	
	mobility:	mobility:	
	preparing a presentation	preparing a presentation	
	about students and	about students and	
	exchanging contacts;	exchanging contacts;	
	a Skype video conference		
	with the Greek reference	with the Greek reference	
	teacher and then with the	teacher and then with the	
	hosting families from Italy	hosting families from Italy	
	and Greece.	and Greece.	

- Preparing questions for the first	- Preparing questions for the first	YES
two interviews to scientists.	two interviews to scientists.	
- Final arrangements with the	- Final arrangements with the	YES
administration of the school about	administration of the school about	
the financial aspects of the incoming	the financial aspects of the incoming	
mobility.	mobility.	
	- Mobility Tool: the Interim Report	YES
	for the national agency has been	
	accepted.	

Franca Monzeglio

ISS EINAUDI CASAREGIS GALILEI, ITALY