CONNECT

Inclusive open schooling with engaging and future-oriented science

GOOD PRACTICES

Description for the site:

Title: "Urban Planning from the perspective of students"

(Restructuring, regeneration and improvement intervention in the local community road network: A research field study)

This good practice presents an open school education initiative for the Environmental, Open Press educational program scenario, developed by the primary school of Voron under the supervision of the teacher Vassiliki Karagiorgos from (01/02/2022 to 01/06/2022). An expert scientist, a surveyor, participated in the activities. It was supported by Mr. Giorgos Panselinas. This practice was previously presented on the official website of the Connect program at the link below:

https://connect-eu.exus.co.uk/el/2022/07/11/%ce%bf-%ce%b1%cf%83%cf%84%ce%b9%ce%ba%cf%8c%cf%82-%cf%83%cf%87%ce%b5%ce%b4%ce%b9%ce%b1%cf%83%ce%bc%cf%8c%cf%82-%cf%85%cf%80%cf%8c-%cf%84%ce%bf-%cf%80%cf%81%ce%af%cf%83%ce%bc%ce%b1-%cf%84%cf%89%ce%bd/

- **Care:** The students dealt with a real problem related to improving the quality of life of the residents of the area where they live. This problem concerned the reconstruction of part of the road network, in order to facilitate the movement of vehicles in accordance with the rules of urban planning. The students who participated in the activities were 12 years old, studying in the 6th grade and totaling 13 members.
- **Know:** The students used knowledge to collect information regarding the history of their place and the road construction of previous years using search engines and the rules of literature review, they used text editor and statistical analysis software to write their project and analyze the data that collected from the questionnaire they constructed according to research methodology standards on the needs of their village residents. They also used mapping and construction software to observe satellite maps and process them to build models. The skills that the students practiced at a cognitive level were related to sciences such as Statistics (Mathematics), History (Modern History of Greece), Informatics (knowledge & use of Word-Excel), Visual Arts (model construction). Through these academic subjects which were interdisciplinary combined and interdisciplinary developed, skills were cultivated such as the processing of cognitive content, the ability to distinguish useful information from a multitude of sources, the skills of digital map processing, the skills of strategic planning and mapping, the skills of problem solving , cooperative learning communication skills, etc.
- **Do**: At the end, the students prepared a presentation of their study and a projection presentation of the entire research process. Websites were posted and they built a mockup with their proposal for the proposed changes to their village's road network. Their model was donated to the Museum of Cretan Ethnology as a kind gesture of offering to their place. They completed the activities honorably at the level of research and as a team at the level of processing, editing and production supported by their families and members of the local community.

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Conclusions on Open Schooling: The activity was integrated into the curriculum. It was useful for the local community, since it solved a functional problem of the village, related to the social issues of the villagers, quite challenging as it was the first time a similar action was taken by students involved in real research conditions and innovative as the students' proposal was advanced by themselves and acted as a barrier to the progress of their country. Open schooling can be both useful and challenging for other teachers because it will go a long way in familiarizing them with designing cross-curricular and interdisciplinary action plans, although it requires a lot of coordination and consistency in planning to ensure success. A flexible design is proposed that will prevent sudden changes and propose alternative solutions.

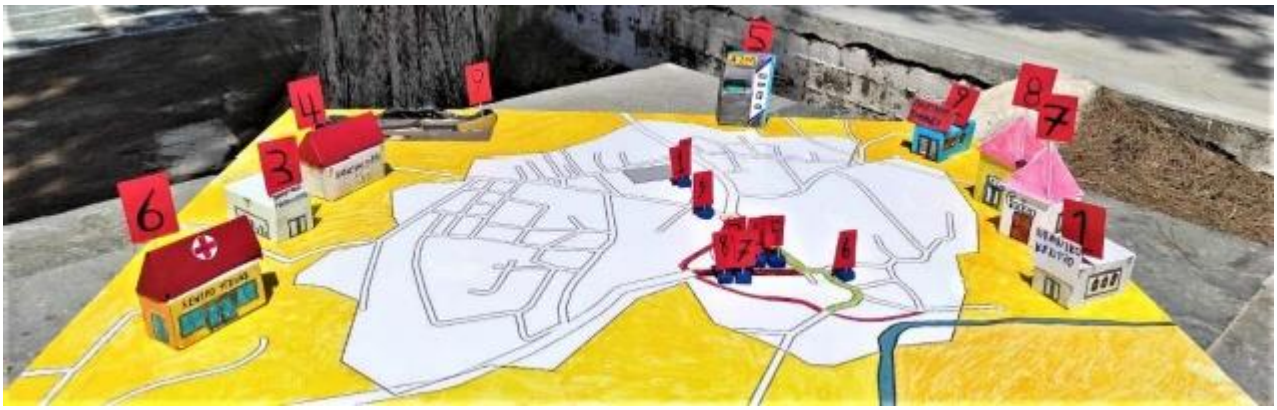
The change/innovation was supported by: [x] School management [x] school association/network [x] Local government [ ] Other: _____

Student results: Students were active and active during the research process. They were consistent in the work they each undertook in their group and seemed to assimilate relatively easily the scientific knowledge they needed to use. Their familiarity with NTs was very helpful in all dealing with digital hardware and software. They learned how a scientific study is structured and how it is conducted. They seemed to enjoy the role of researcher to the point of engaging in the tasks of the other groups as well. As an example, one student mentioned "Did you see, ma'am, that I can work in other groups and not just the one I'm in?" Their activation productively cultivated the speech skills of both production and comprehension of oral and written texts.

This practice contributed to the increase of:
[x] engaging families with sciences [x] involving girls in science [x] raising awareness among students about careers in the natural sciences

Please specify: Parents participated in the collection of questionnaires for the student survey. The girls actively participated in the mapping and literature review and in general all students showed a special interest in digital maps and the contribution of geomorphological terrain to road construction.

Select the most relevant photo related to your initiative (which will be public and published under an open license) to represent the practice.



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ABOUT THE CONNECT PARTNER that supported the school	
ORGANISATION	Regional Directorate of Primary and Secondary Education of Crete (RDE)
COUNTRY	Greece
Όνομα συνεργάτη	Georgios Panselinas
Implementation period	Starting date: 01/02/2022 Ending date: 01/06/2022
ABOUT THE TEACHERS PARTICIPATED	
SCHOOLS	Primary School of Voron
TEACHERS names (for Good Practices' Certificates)	Ms. Karageorgiou Vasiliki
Gender	
SUBJECT (Natural Sciences, Physics, Chemistry, Biology...)	Natural Sciences, Mathematics, Language, Visual Arts, Informatics
How many subjects were used in open schooling?	2
Title of open school education resource used	Urban Planning from the perspective of students (Restructuring, regeneration and improvement intervention in the local community road network: A research field study)
Type of learning scenario of science activities (structured or open scenario)	Open Scenario
Curriculum modules	• Health and people. Factors affecting human health. Microorganisms – transmission and treatment of pathogenic microorganisms. Problems • Through molecular forces • Carbon cycle • Aerosols • The mathematics of the pandemic - non-linear phenomena • Air pollution
ABOUT THE STUDENTS PARTICIPATED	
Class	Sixth grade
Age (average)	12 years old
Number of students participated that concluded the educational scenario	13
Number of students who completed the educational scenario of scientific activities	13
SCIENTISTS PARTICIPATED:	
Name	Alevizakis Alexis
Field	Topographer

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QUESTIONNAIRE

01. How have you (teachers) used open educational resources? Could you describe what you did in your lessons?

Student activities with scientists:

The students, together with the expert scientist, carried out 2 research workshops in which they got to know the topographer's profession and familiarized themselves with map processing.

Student activities with their families:

The students and their families collaborated to collect and complete the questionnaires in their research.

02. How have your students used the CONNECT resources? Do you have (or could describe) samples of better scientific actions (for our site/rewards)?

Any examples of what the students prepared?

The students prepared a presentation to communicate their action.

Slide? Poster? Video?

(Add an image if possible)

They built a model to capture their proposal on a map.

03. How well did the science action learning scenario resources meet your needs?

Example related to the school curriculum:

The Connect program was integrated into the skills workshops course and thus included in the curriculum.

Students involvement:

The students from the beginning to the end had the initiative to implement the didactic planning of the entire activity under the guidance of the teacher.

Student interest and confidence in science:

They showed particular interest in applying the rules at a professional level and sought guidance from the experts.

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04. How easy or difficult it was to use the science action learning scenario resources?

Issues related to materials, procedures, pressure from the interaction with the curriculum:

It's not easy! It requires a combination of many subjects and saving many hours of work inside and outside of school. The curriculum is not sufficient to implement major action programs even though we had the materials and resources the time was very pressing.

05. What were the benefits of implementing the science action learning scenario for your students?

Describe the results of the students in their scientific actions related to:

KNOWLEDGE	Statistics (Mathematics), History (Recent History of Greece), Informatics (Knowledge & Use of Word-Excel)
SKILLS	Cognitive content processing, ability to distinguish useful information from multiple sources, digital map processing skills, strategic thinking planning and mapping skills, problem solving skills, cooperative learning communication skills, etc.
ATTITUDES	Appreciation of the value of a historical place, cultivating respect for the historical monuments of our country, strengthening the desire for development and improving living conditions, adopting attitudes to increase people's standard of living, raising awareness of issues of social content, etc.

06. What have been the challenges of using educational science activity scenarios for your students?

Main challenges faced by students (Please select all that apply):

☐Difficult…

☑ Long duration…

☐ Boring…

☐ Other (Please specify): …

07. What activities worked well with the curriculum?

What helped the children achieve the learning objectives:

All activities worked well. What helped the students achieve the learning goals was team spirit and good coordination.

08. What activities did not work well with the curriculum;

Anything that could be done differently or avoided:

It would be best to start the program earlier in the school year to ensure more time.

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09. The school Principal's opinion about CONNECT:

The CONNECT program greatly activated the students of our school and gave another impetus and perspective to the operation of the school. For the first time we supported a laboratory-type action like this. I was especially happy to see them working as a team!

10. Parents' opinion about CONNECT:

We got excited together with our children looking for information about the history of our village and helping them gather information for their research. We also learned with them! I wish such things would happen and we would see our children participating in the needs of our country!

Submission:

1. Please save the file in the following format: **YEAR MONTH DATE COUNTRY SCHOOL** (e.g. 20220326GR1stPrimarySchoolHeraklion. docx)
2. 2. Please send this form to CONNECT Panel: https://tinyurl.com/Connectbestpractices2022

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