

# Final report

**Project:** One Landscape, Two Stories: People and Birds (a Study of Slătioara Pit)

**Topic:** Biodiversity and education

Quarry/ Pit: Slătioara, Olt County, Romania Project proposal submitted by: Ioana Stoicescu

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**Project link:** http://www.quarrylifeaward.ro/node/30056



#### **Abstract**

The project aimed to involve students from different Romanian communities in activities that raise awareness on the importance of the fauna and flora in the proximity of Slătioara Pit, Olt County, Romania. In order to form a complete image regarding the landscape as a habitat, the project presents two perspectives, namely two parallel situations of equal importance to the community, occurring in the same landscape: *people* and *birds*.

The *people* component envisaged Heidelberg Cement Company (namely Slătioara Pit) as one of the stakeholders present in the landscape. During the field trip, the students had the opportunity to visit Slătioara Pit and interact with Manager Liviu Niță, who described each step of the technological process.

The students were guided into observing that the two topics, *people* and *birds*, are closely connected trough the concept of *landscape*, which both of these groups use according to their needs. Hence, the students reached the conclusion according to which Olt River is a highly important resource that brings benefits to both communities (natural and anthropic, if managed in a responsible manner, with the help of education.

We consider that the implementation of this project brings benefits for biodiversity by promoting its importance, not only among students, but also in the teachers' community. In this sense, the project aimed to facilitate a starting point for other similar activities in schools, by providing a collection of good practices and educational materials. These were presented as a video collection as well as a downloadable Teachers' Guide, posted on educational websites. We wish that such materials provided an opportunity for other teachers to cultivate their students' interest for the close environment and biodiversity, as well as to help them form an idea on how a pit actually operates.

#### Introduction

Our project intended to call into question the links between biodiversity, the exploitation of natural resources and the perception of the community towards the activity at Slătioara pit. Thus, the aim of the project was to involve students in activities focused on environmental awareness and to highlight the manner in which the natural resources can be exploited with minimal impact on biodiversity. We considered that a theoretical approapch is not enough to raise students' interest on this subject; therefore we designed activities based on the students' direct participation.

In what follows we present in detail the aim of the project, its objectives and the undertaken activities to achieve our goals.

## **Objectives**

The project aimed to involve pupils from three different communities (the commune of Slătioara- Olt County, the city of Bucharest and the commune of Glina- Ilfov County) in activities that raise awareness on the importance of the fauna and flora in the proximity of Slătioara Pit, Olt County, Romania. In addition to the schools mentioned above, we had the opportunity to involve a fourth school, from the commune of Brăneşti (Ilfov County).

The objectives of the project were focused on two directions, which aimed on the direct involvement of the pupils. Therefore, in order to form a complete image regarding the landscape as a habitat, the project brought into picture both the natural component (O1) and the human component (O2). The objectives of the project were as follows:

- (O1) Informing pupils about the life (habitat, behaviour etc.) of bird species that nest in the proximity of Slătioara Pit (ROSPA-0106).
- (O2) Informing students regarding the activity at Slătioara Pit.

In addition to these objectives, the project aimed to document all the activities in the shape of a Teachers' Guide (developed in both Romanian and English), in order to pass on our experience to educators who wish to repeat (and perhaps improve) some of these activities together with their students. Therefore, the target group for this material consists of the teachers' community throughout Romania (and not only), to which we have access through our team members, who work in the field of education and are part of key-groups.

#### Site description and the reasons for its selection

Among the sites participating in The Quarry Life Award Contest, we considered Slătioara gravel pit to be the best location for the implementation of our educational project. The gravel pit is located in the south of Romania, close to the village Slatina. The wet extraction takes place within the river Olt (lower valley). The extraction site itself consists of different habitats, humid (riparian willow belts, reed beds and pioneer habitats) or dry (grassland).

The area of Lower Olt Valley is part of a Natura 2000 protected area (ROSPA-0106) and its habitats are important for sedentary and migratory birds, some of them of national or international importance.

Choosing Slătioara gravel pit for the implementation of our educational project offered a series of advantages, such as the location of a secondary school in the near proximity of the site (five minutes by car), the possibility of conducting outdoor observations both in and outside the pit area, as well as the availability of the staff to offer support in filming activities.

#### Methods

Given the significant differences in the students' background and level of education, we considered that the best way to achieve our goals was to prepare visually-stimulating materials and interactive activities, rather than having a more theoretical approach. Instead of presenting chunks of information, we offered starting points from which the students were encouraged to use their observation skills, to ask questions and to reach answers by themselves.

In the month of April (2016), we had a first visit to Slătioara, in order to meet the staff at Slătioara pit and film documentary videos. Also, we had a first meeting with the students in the local community.

The second and most important field trip to Slătioara took place on the 15<sup>th</sup> of June 2016 and involved students and teachers from the four mentioned schools. It was an extremely challenging and valuable experience to our team of teachers, as well as highly beneficial to the groups of students. We created meaningful learning situations by allowing the students to interact freely (with other students and with new teachers).

For this field trip, our team prepared:

- a. a visit to Slătioara pit, with a view to understanding the technological processes and interacting with the staff;
- b. ice-breaking outdoor and bus activities targeting the interaction among the four different groups;
- c. photography exercises, with a view to observing nature and capturing memorable details in images;
- d. birdwatching and species identification using flash cards.

#### **Summary of persons involved in the activities:**

**Target group:** pupils from schools belonging to four different communities: Slătioara (Olt

County), Brănești and Glina (Ilfov County) and Bucharest

**Participant schools:** three public schools (Slătioara Secondary School, School no.1 Brăneşti, School no.1 Glina) and one private school (Aletheea School).

Number of involved pupils: 60 Number of involved teachers: 5

Number of involved economic agents: 1 (Heidelberg Cement Romania)

**Sponsorship:** Litera Publishing House has offered books from the National Geographic

collections, which were offered to Slătioara School.

#### Results

The results of the project had two perspectives, one that is material, and the other is immaterial.

According to their nature and their message, the project results promote the image of the Quarry life Award competition and Heidelberg Cement Company. Below we detail these two directions and their specific results.

A. The material perspective: our team developed a various set of resources and accomplished the following results:

## 2. Visually stimulating materials

a. **A collection of videos** involving Heidelberg Cement staff and students from the local community- please view here:

https://www.youtube.com/playlist?list=PLvKkpfrWZUbEkJ3DX9kQL1b\_2ITilC Mph

This collection was intended not only to stimulate the viewer's curiosity towards the activity carried out by Heidelberg Cement, but also to become a source of inspiration for teachers who will consider applying similar activities together with their students. Thes videos were filmed and edited by our team, with the help of Heidelberg Cement staff, and include the following topics:

- ➤ Part 1- A visit to Slătioara Pit- an introduction video inviting the public to join our journey;
  - This video presents one of our team members visiting Slătioara pit and introduces the viewers to the landscape.
- ➤ Part 2- *Interview at Slătioara Pit* students asked, Mr. Liviu Niță answered; This video is extremely spontaneous and presents students from Slătioara School addressing the pit Manager the first questions that came to mind. Mr. Liviu Niță agreed to answer all of them, hence the resulted video adds significant value to this collection. None of the exchanged lines has been directed in advance.
- ➤ Part 3- Slătioara pit- how does it work?

  This is a short documentary video, designed to fit the understanding level of secondary-school students. It presents all the steps of the technological process, starting from the extraction until the delivery stage.
- ➤ Bonus video- *Giant Bubbles*This video presents the activity which ended our first meeting with the students at Slătioara. The Teachers' Guide includes more details regarding this activity.
- b. Hand-crafted flash cards for bird species identification
- c. A photo gallery with images taken in the field by our team members
- d. **Photography displays in schools** and on social media

Our team selected 25 of the best images captured by the students and prepared them for display in the four participant schools. Moreover, the selection of images was posted on our partners' websites and social media. We decided not to give awards to particular students, hence the book donation that we received from Litera Publishing House went to the Slătioara host school.

e. A Teachers' Guide

This PDF document (developed in both Romanian and English) targets the community of teachers and includes all the educational resources that we used or resulted from our project, such as:

- links to our video collection;
- printable materials for bird species identification and tutorial for teachers;
- nature and portrait photography advice, as well as a gallery of our examples;
- a list of outdoor and bus activities for students;
- a list of recommendations for planning a field trip, according to our experience from the  $15^{th}$  of June.

The Romanian version of the Guide was uploaded for free download on Infinit-Edu (www.infinit-edu.ro), an educational website which provides teachers in Romania with free materials (<a href="http://www.infinit-edu.ro/material-didactic/resurse-utile/iale-romania/un-peisaj-doua-povesti-oameni-si-pasari-studiul-balastierei-slatioara-77">http://www.infinit-edu.ro/material-didactic/resurse-utile/iale-romania/un-peisaj-doua-povesti-oameni-si-pasari-studiul-balastierei-slatioara-77</a>).

Moreover, the English version of the document will be freely distributed by IALE Romania, among teachers in Europe who are or will be part of the IALE Working Group on educational topics (<a href="http://www.landscape-ecology.org/index.php?id=101">http://www.landscape-ecology.org/index.php?id=101</a>).

### B. The immaterial perspective

Through the actions carried out within the project, we consider to have achieved a range of benefits for biodiversity, local community and the company:

- 1. Awareness of biodiversity importance among teachers and students from different communities;
- 2. Local pride for flora and fauna species;
- 3. Engaging different institutions to collaborate towards environmental awareness and opening opportunities for future projects.
- 4. Creating links between Heidelberg Cement Company and local community that are based on the company's involvement in children's education.

### **Discussion- Added value for the project**

#### Added value for biodiversity

We consider that the implementation of this project brings benefits for biodiversity by promoting its importance among student communities. By illustrating the natural beauty in photographs, one has the opportunity and time to reflect upon it.

#### Social added value

By bringing together four groups of pupils coming from different social and geographic environments, the project will also bring together four different mentalities: that of a rural area (Slătioara School), that of an urban area (Bucharest School), that of a peri-urban area (Brăneşti School) and that of a poor rural area (Glina School).

By working together, the pupils not only got in contact with information on the environment, but they also had the opportunity to socialize with pupils their age and from different backgrounds.

Usually, this kind of work comes with many challenges when pupils do not know each other, as their age is quite fastidious and they come from such different environments. Taking this into consideration, our teachers, facilitators and volunteers were prepared with many different ice-breakers and get-to-know-each-other games which resulted in a more compact group. Until the end of the field trip, they suceeded to socialize and to start friendships, which still last and grow, especially between the Glina- Brăneşti communities.

Many pupils discussed different social problems and it seems that some general discrimination barriers have been overcome, which was a huge success to us.

This project was also a good opportunity for teachers and volunteers to exchange experience in the field of education, methods of non-formal education and scientific information. We believe that all involved students, teachers and volunteers have now higher expectations from a school trip.

Moreover, not only the project facilitated a link between the local community and Heidelberg Cement Company, but also between the four participating schools. This has been a new and valuable experience for all the teachers involved, since managing such a heterogeneous group of students (in terms of background and education) has been very challenging. Due to the fruitful collaboration of people from various institutions, a network has been developed, which can be valuable for future initiatives towards education and raising environmental awareness

#### Added value for the company

The main added value of the project consists of the connection established between young people in the local community and Heidelberg Cement. The pupils had the opportunity to see and understand the activity of Slatioara Pit, and also to gain awareness on its importance for the local economy. Moreover, Mr. Liviu Niţă, Manager at Slătioara pit, openly described his experience as a Heidelberg Cement employee, which can be a motivating example for young people who wish to find employment inside the community in the future.

Media opportunities that we used for promoting Heidelberg Cement environmental activities included:

- 1. Quarry Life Award official blog: <a href="http://www.quarrylifeaward.ro/node/30056">http://www.quarrylifeaward.ro/node/30056</a>
- 2. Competition logos: the Quarry Life Award logo and the Heidelberg Cement logo were printed on the materials distributed to students.
- 3. Partner websites and social media:
- IALE Romania: http://landscape.cc.unibuc.ro/
- Infinit-Edu, educational website- www.infinit-edu.ro
- Aletheea School, <a href="http://www.aletheea.ro/quarry-life-award-2016-biodiversitatea-surprinsa-in-imagini-de-catre-elevi/">http://www.aletheea.ro/quarry-life-award-2016-biodiversitatea-surprinsa-in-imagini-de-catre-elevi/</a>
- The Faculty of Geography, University of Bucharest (www.geo.unibuc.ro)
- Facebook pages of Aletheea School, No.1 School of Brănești, IALE Romania and personal pages of team members
- IALE Romania YoueTube channel: https://www.youtube.com/playlist?list=PLvKkpfrWZUbEkJ3DX9kQL1b\_2ITilCMph
- 4. Photography displays in schools.

#### **Conclusions**

One Landscape, Two Stories, People and Birds and lot of experiential learning for all parties – pupils, teachers, volunteers and pit workers, concluded in various ways: a valuable guide for teachers, movies and interviews, fascinating photography, networking, memorable moments and new friendships.

Our project team designed a collection of methods and good practices in the field of environmental education, which can be used by any teacher or facilitator for stimulating the interest and awareness for landscape ecology. In addition to this, the project facilitated a link between the local community of Slătioara, Heidelberg Cement Company and four different schools in Romania.

Due to the successful collaboration between many people from different institutions, a working group has been developed, which can be used for other future educational projects or initiatives. Our project's attempt to provide a framework for continuity in environmental education has been fruitful.

## APPENDIX 1. PEOPLE- Our first visit to Slătioara pit



Fig. 1. Location of Slătioara, Olt County, Romania



Fig. 2. Landscape at Slătioara pit





Fig. 3. and fig. 4. Preparing documetary videos together with Mr. Liviu Niță, Manager at Slătioara pit

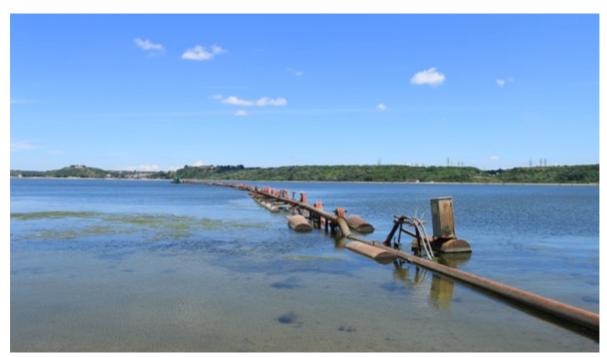


Fig. 5. Landscape at Slătioara Pit, Olt River, ROSPA-0106

APPENDIX 2. BIRDS- Some of the species we encountered in our field trips



Fig. 1. Podiceps cristatus



Fig. 2. Ardea cinerea



Fig. 3. Fulica atra



Fig. 4. Phalacrocorax carbo



Fig. 10. Phalacrocorax carbo

## APPENDIX 3. People and Birds-School field trip at Slătioara pit





Fig. 11. and fig. 12. Students interacting with Mr. Liviu Niţă, Manager at Slătioara pit





Fig 13. and fig. 14. Students visiting Slătioara Pit



Fig. 15. (Incomplete) group of students from four different schools (Slătioara, Glina, Brănești, Bucharest)





Fig. 16, 17, 18, 19. Students participating in photography activities





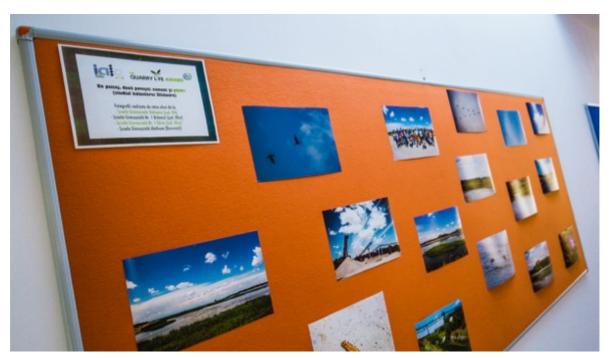


Fig. 20. Photography display, Aletheea School, Bucharest

#### APPENDIX 4. Promoting our project

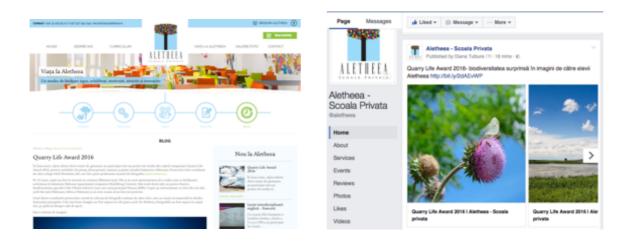


Fig. 21. Screenshots- website and Facebook page of Aletheea school, Bucharest (www.aletheea.ro)

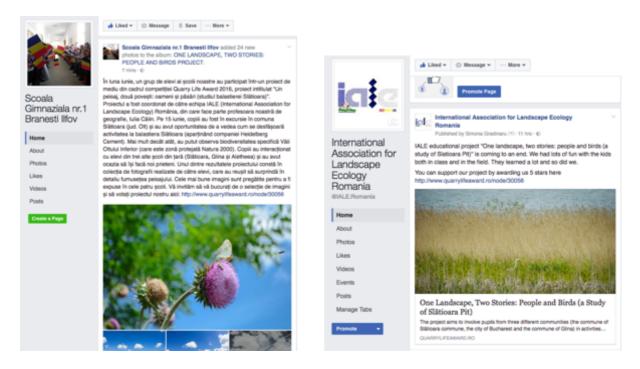


Fig. 22. Screenshots- Facebook page of No. 1 Brănești School and IALE Romania

Fig. 23. Screenshot from Infinit-Edu, educational website. Please download the Teachers' Guide here: http://www.infinit-edu.ro/material-didactic/resurse-utile/iale-romania/un-peisaj-doua-povesti-oameni-si-pasari-studiul-balastierei-slatioara-77



#### **APPENDIX 5. Feedback from students and teachers**

As a teacher in two of the four schools involved in our project, I could easily assess the impact of our activities on my students. I noticed from the beginning the contrast between communities and I was prepared for the challenges of experiential learning.

Most of the children were happy to attend the activities for simple reasons such as skipping classes on a Wednesday. And they knew more about the project and activities, but however they were expecting a classic trip, to mark several touristic attractions and have fun. But a different story was waiting for them...

It was a visible joy for them to socialize with students from other schools and I have seen their interest for the processes taking place at the pit.

Only when we arrived at the site did I realize that for many children it was the first time they saw such a large river as the Olt and confused the river with the sea, so it was a very good opportunity to clarify aspects of Romanian geography and local horizon geography.

Some photography enthusiasts enjoyed our professional photo cameras and lenses, so they took great pictures of their mates and of rare birds that they had not met up to that point.

New friendships between pupils from different schools were created and this made me very happy, and in the same time the experience from the project became complete. I believe that students have now higher standards for everything that means a trip and that they are more excited and interested when it comes to projects.

Iulia Călin, Teacher, Brănești and Glina Schools, Ilfov County

The significance of this type of project is given by its impact over groups of students by making them interested in biodiversity and also in activities that are less familiar to them. More important is the fact that some students live in the proximity of the gravel pit without knowing details about the work taking place within the site.

From my point of view, students have benefited from the provision of correct information, associated with practical applications. The teaching materials prepared by the working team were clear and easy to use during the in-site visit. By applying methods of informal education, students have shown greater interest compared to standard lectures.

If I were to repeat this experience, I would suggest organizing the students in working groups, for a better management.

Ana-Maria Calotă, volunteer

For me, this project was awesome. It helped us grow our general culture and also our personal development, through the knowledge of new information and people. I am now friend with many pupils from the other participating schools. A great experience in every way!



Maria Stan, student

The Slătioara pit project was a unique experience for me, meeting different groups of people from different backgrounds. I learned that it does not matter how you look or dress, but your personality counts the most. That people coming from poor familes with issues are brilliant people that hide beautiful stories. The differences between a pupil from a private school and a public one is huge. Different education. I took pictures with proffesional devices and we got to know each other more. I recently spoke with Bianca, pupil from Glina, and she sent greetings of success in exams to all of us. I hope I will repeat this experience.



Adriana Rădută, student

The project from Slătioara was a unique project, we have seen what nature gives us and we admired birds and other animals in their own habitat. I loved this project very much.



Nicuşor Tone, student