



## **REPORT**

### **E-BIODIVERSITY**

*Bando ex art.4 Legge 6/2000 - MIUR / Ministero dell'Istruzione, dell'Università e della Ricerca*

This project has as objective to create a series of innovative activities, at least in the area of reference of the project that is the National Park of Gran Sasso and Monti della Laga and the Abruzzo region, which could be a start -up to the dissemination of scientific culture weaving plots that connect the communication methods with the use of advanced web technologies and methodologies workshop experience.

The theme around which the program is implemented, Biodiversity, is a term that encompasses many facets and can be approached from different points of view and that will fields of expression, direct experience in the field and in the laboratory using communication based on the creation of a portal, intended as a platform for neo-scientific community with the aim of disseminating and sharing activities and experiences with anyone interested, disseminating new communication models especially in other schools of the Park, the region and even beyond.

Know and make known Biodiversity in order to get closer to the preservation of the same, not as a scarecrow notional imposed but as a vocation of each one that finally recognizes an integral part thereof, is an activity that the Park Authority, through its CEA, Environmental Education Center in the Park, recognized by the network of regional INFEA of the Abruzzo region, has always been committed to spreading, approaching this issue the school visits the Park and beyond, with different types of intervention included in educational programs in common the same end.

Educational programs designed, managed and executed by the CEA of the park are related to scientific activities (research, monitoring, surveys, restocking, management of flora and fauna or agro-forestry-pastoral) own the Protected Area and are implemented in programs EU funding, national and local ones

Years of experience has enabled us to design this project by introducing new methodologies that encourage users to a modern approach to the subject matter. Information technology and science with the aim of protecting the environment using the most modern methods of connectivity and network communication, to stimulate the participants and especially the children who now live with them, perhaps with a partial use and not always environment's friend.

The network INFEA the Abruzzo Region, network encompassing all the Environmental Education Centres in the Abruzzo region, is in this case in relation to this program an important vehicle for the promotion and dissemination of the activities of the same.

Promotion of scientific and technical culture in schools of all levels, including through better use of scientific laboratories and multimedia tools, involving them with initiatives to facilitate communication with the world of research and production, as well as to increase widespread awareness of the importance of science and technology for everyday life and for the sustainable development of society.

The project was divided in six actions:

#### Action 0 - Programming Phase

During this initial phase will set the calendars of action will be initiated and designed.

#### **Action 1 - Realization portal and e-learning platform**

Creation of a multimedia portal as a meeting place of different actors. The function of the portal will be to create a virtual place, for exchanging information, experiences, tips, materials and data.

The same portal will be used for the initial phase of the projects for schools that will include meetings in class, surpassing the use of lectures, with the inclusion of activities of e-learning. This is made possible by the LIM that the schools have.

#### **Action 2 - Creating Learning Path 'Laboratory in Nature'**

This is the stage where you go directly to schools. Each Institute will participate in the project with 1 classes for a total of 5 classes involved. Each class, teachers and pupils will be involved in the detailed design of the 'Laboratory in Nature' that is a path of 5h for each class. Program: Teaching in the classroom with the use of e-learning technology (2h), laboratory activities, each lasting 2 hours, including those listed below:

- **THE SONG OF ARMILLA FOR WATER:** Activities: Water and life return to the forests and the seas, The hydrological cycle of the mountains, springs and rivers of the Park, The cycle of consumption and water in the city, Signs and symbols of water, Hydrological and biological observations of a watercourse, card detection: Sampling and classification of macroinvertebrates and insects.
- **THE RIVER OF WONDERS** Activities: Sampling of water for application index IBE, chemical analysis with field kit, application of other indices such as eg IFF, collection of plant samples river for the construction of an elaborate vegetation, Study of soil chemical analysis and microscopic observations
- **MEET THE 'Camoscio d'Abruzzo'** Activities: Guided tour to the Museum of Abruzzo Suede Area Wildlife Tour of Farindola, game animation "Exploring Playing"
- **FRIEND BOSCO** Activities: bioindicators of air quality, know the trees and the soil, laboratory theater environment Legends of The Mountain Asleep.

**Action 3** - Training for teachers and professionals the training dedicated to teachers, social workers and educators in the field, college students, on biodiversity and the activities of innovative communication. A workshop will be conducted for 2 meetings , in these meetings will alternate training moments, and experience.

#### **Action 4 - Implementation Final Event**

All schools will compete on biodiversity and land conservation, with many tasks in a virtual date through the network.

#### **Action 5 - 6 Promotion and continuity of the project**

In the course of the project will be carried out constant promotion of activities and results. The project, which over the years will continue his journey through the continuous implementation of the portal.

Laboratory activities in question, will be structured so as to create a model easily replicable in other protected areas and national and replicable in schools of the same Park Authority in the following years with reduced amount much lower. The e-learning, modern technology, allow us to communicate with innovative methods with a large number of people efficient and the movement of operators, always under the protection of environmental sustainability. The platform will be closely linked to the definition of the portal, will allow the widespread use of the introductory part linked to the first approach to the concept of biodiversity, tailored to different age groups and types of users that they will involve. The workshop will have a relapse national will to participate in the same initiative anyone interested in the issues addressed at the national level through a network of contacts that

are already present and in possession of the Authority, school teachers through the contacts of the Abruzzo Region Network Infea Abruzzo of which the CEA is a part, and through them to the diffusion of the same initiative. The aim is to create a network of levels and different mesh but all oriented in one direction, to address the issues set out trying to make it in depth and applying innovative methods and effective communication and dissemination of scientific, especially with regard environmental sustainability. The implementation of the portal will enable large-scale deployment of activities implemented and the experiences of the participants in order to create a useful background to anyone who interfaces with the subject matter.

The ability to use the portal as a virtual place from which to draw information, experiences, take cues, but also as a container of activities, a place for sharing of other experiences outside of the strictly linked to the project on the same line of argument, which has many possibility of interface.

This will allow the spread of activities, data and experiences on a national scale and not only, indeed the goal once launched the portal, is to feed the same with the largest number of possible actions, in order to maintain a living entity and in step with the times.

It will include various sections dedicated to different topics that fall in the same issue, and the implementation of the project will create insights implemented by various parties.

The final event will serve to give further feedback to the activities that may be carried out after the end of the project. At this event, will be given a resonance at the regional level, in order to involve and encourage other schools to attend the event above, and bring to the attention of all the activities. At the same time the schools that did not participate directly in the activities can bring and share experiences made in other areas, and create a sort of educational exchange between reality and environments