



RWL Case-Study

Country

Hungary

Name of the programme

Tree Project - Tree as a living organism, a raw material and a symbol (*Fa, mint élőlény, nyersanyag és szimbólum*)

Age of the children involved?

10-12 years old (4th to 6th grade)

Short summary/introduction/teaser

A very good example of using project method in a primary school, even in schools of different European countries. The theme of the project – the tree - is very complex. It covers several branches of knowledge. Therefore it is suitable to be included in every subject's curriculum in any school year in order to shape the environmental awareness of the students, to develop right attitudes toward environment and to educate children for sustainable development.

What is the frame?

Various aspects of a tree – it is a living organism, and a raw material as well as a symbol.

What are the goals of the programme?

Since this project involved the participation of schools from Germany, Spain and Hungary, the long-term aim was to build a well-operating relationship with the potential of future common projects. Students also get a chance to practise a chosen foreign language.

The environmental aim of the project was to shape the students' approach towards nature by developing more dedication and a more sensitive, more responsible approach towards nature and society.

New methods were introduced in the learning and teaching processes as the schools, teachers and students from the different countries learnt from each other.

What values are promoted in the programme?

- according to the hand model: respect for nature and care for the state of our planet, respect for future generations.
- according to PIRC's values: a World of Beauty, creativity, curious, protecting the environment, respect for tradition, responsible, unity with nature.

Which competencies are promoted that empower learners to shape a sustainable future?

Learning for sustainability means empowering the learner to shape a more sustainable future. To do so, experiencing self-efficacy and especially aspects like participation, cooperation and self-directed learning are critical. In this project, there is a possibility to

- enable learners to cooperate, participate, take responsibility and learn in a self-directed way,
- enable learners to be reflective and critical thinkers – considering different perspectives to reach



informed opinions and decisions,

- empower learners to be creative, flexible and able to take positive action to deal with change,
- enable learners to become conscious of interconnectedness - you, me and the world around.

The authors of the project emphasised that 'while students had been working with different themes, it helped them develop their self-concept and self-recognition as well as environmental awareness. Students learnt about sustainability, their country and ethnography, and became more active citizens. Hopefully this project contributed to raising environmentally more aware adults.'

Which of the specific scientific concepts does the programme relate to?

Cycles: Year life cycle of trees, cycle of the nutrients, etc.

Energy flow: Plants like trees take a really important place in food chains. Using solar radiation to produce chemical energy...

Which ecological problems are involved, if any, and how? (Refer to mindmaps of 9 planetary boundaries)

This project covered almost all of the 9 Big Issues (climate change, ozone depletion, fresh water use, chemical pollution, land system change, biodiversity loss).

Depending on the particular project design this Tree project could be related to atmospheric aerosol loading and biogeochemical loading (nitrogen and phosphate cycles) as well.

Transferability: Which different areas of learning are included and how?

Learning experiences in this project were related to

- the global society (trees in the ecosystem, deforestation),
- the learner's communities (planting trees in the school yard, students discovering their own family trees),
- the non-natural environment (studying and making tools of wood),
- the natural environment (famous and native trees of a country) and
- the learners themselves (making tree storys, drawing illustrations for it, searching and singing folk songs related to trees, making investigations of trees' leaves, barks in the school yard).

What educational strategies (learning models, methods, etc.) are used in your programme?


Project method, Theme days

How is the programme evaluated? How do you know the programme achieved its educational goals?

In the beginning of the project, students as well as control groups of partner schools filled in a questionnaire set by the teachers involved in the project to assess their knowledge. The same questionnaire was filled in after the completion of the project (in June 2008) and it demonstrated an increase and depth of knowledge.

The whole project was evaluated at the end of every year: a report and a ppt presentation were compiled to show how the planned programmes and activities were carried out. These results cannot be measured in numbers, but are shown by the knowledge of the students and can be utilised later on.

Both teachers and students were very enthusiastic and took part happily in all kinds of activities. Students even had mentioned it in short essays written at school.



However, no major change in behaviour was expected since environmental education, forest school, loving and knowing nature and sustainability education are all already an educational priority of this school.

Describe the programme

It was a three-year long Comenius project with the participation of a Hungarian, a German and a Spanish school. This description details the activities of the Hungarian school, Bárdos Lajos Bilingual Primary and Secondary School in Budapest (<http://www.bardosl-bp.sulinet.hu>).

In 2005 the project was launched with the help of the Natural History Museum in Budapest when Hungarian students took part in a workshop dealing the 'tree theme' in the museum. This workshop was the starting point of the whole project.

In the Hungarian school they started the three-year project with a 4th grade class (10-year olds).

Teachers were trying to involve as many different fields as possible in environmental education and also in science education. That is why museums play an important role in these. In partner schools, however, lessons in museums and environmental education itself did not play such an important role. The Hungarian school offered many new ideas and methods based on their experience. Through this, this school played a role of demonstrating different educational approaches during the project, e.g. in how to involve museums into the learning and teaching processes.

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The project in the Hungarian school was coordinated by a team of 3 members with significant support of the leaders and teachers of school.

Activities

In all three schools similar activities were carried out and documentation of the activities was sent to the partners. These activities included:

- 'My tree of tale' – with this title children were asked to prepare drawings, illustrations of stories, studies of trees using different techniques.

In the first year there was a call for tender announced for all children in the Hungarian school to design a logo of the project. The winner logo was accepted and used as a logo of the project by the partners.



- Partners prepared their schools' website to include information on the Tree project as well.

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Unconventional environment lessons were organised in the school garden: investigating leaves and barks, fruits, measuring height of trees, exploring environmental impacts on trees etc.



- The Hungarian school received an apple tree sapling from the German partner: it was planted in the school garden and the children monitored its development.
- Unconventional museum lessons were held at the following places:
 - Hungarian Natural History Museum, Budapest (From cradle to grave)
 - Museum of Agriculture, Budapest (Subjects made of wood, famous trees; Forests and their flora and fauna in Hungary),
 - Museum of Fine Arts, Budapest (Tree as a symbol in graphic art; Tree as carrying material – a visit to the restorer's workshop of the museum),
 - National Gallery, Budapest – here children could study the family tree of the historical family Rákóczi as well as articles for personal use made of wood. After the museum visit children prepared their family tree with the help of their parents.

There were a lot less opportunities for museum lessons in the partner countries, nevertheless partners managed to have a good relationship with local and neighbouring museums. The Spanish partner prepared a work sheet together with the local museum. Although they left the project after one year, this cooperation can be considered as a great step for them in environmental education.

- Building personal contacts: although language difficulties did exist, there were corresponding pairs in German, who even solved common tasks via email. The project's working language was English, so help from English teaching colleagues was needed.
- 'Beautiful tree' photography tender (teachers as well as students could apply) in all three partner schools. The winning photos were shared with partners and a school exhibition was set up.
- Theme day – organised for all of the students of the school. During this day students studied the tree topic from various aspects in every lesson. In the Spanish school there was long tradition of theme days involving the parents actively as well.
- Hungarian students searched for famous trees of the country, and related legends and stories. Maps were also prepared indicating the location of these trees.
- 'Native trees' – students collected information, photos, and pictures about native trees of their countries. Later these pictures were also used to prepare memory games and puzzles. The entire game was compiled from photos and pictures of the three countries.
- Songs related to trees – children collected and learnt such songs.
- Wood as a raw material – children had a chance to get to know wood as a raw material while preparing smaller objects, models, and personal articles made of wood.
- In each school an exhibition was set up to show the 'outcomes' of the project.
- The Spanish and German partners managed to organise visits to a cork and wood-processing factory. Unfortunately, there was no such programme in the Hungarian school.



- 'Travelling exhibition' focusing on oak tree was prepared together with the Natural History Museum. It was exhibited in the school as well as at ELTE University complete with work made by the students. During a partner meeting in Budapest, project partners had a chance to visit the exhibition. Other schools from the district were also invited to visit the exhibition, and they could see the work prepared in project through this exhibition.
- The closing document of the project work was a book: 'Book of Trees' (see here online: <http://www.bardosl-bp.sulinet.hu/fakonyv.pdf>) containing the most typical native trees of the three partner countries, the trees' characteristics, the documentation of memory and puzzle games made from these, the stories of famous trees, the collection of songs about trees, the pictures of the photo exhibition, project products and the photos of common experiences and works.

Short introduction of the author of the programme:

A short introduction of each school participating in the project can be found in the 'Tree book'
<http://www.bardosl-bp.sulinet.hu/fakonyv.pdf>.

Included resources / materials / tools.

Project details (in English):

<http://www.bardosl-bp.sulinet.hu/fa/angol/aalap.html>

Photos or videos, logos

Tree project report including photos of project outcomes (in English):

<http://www.bardosl-bp.sulinet.hu/fakonyv.pdf>

Photos:

<http://www.bardosl-bp.sulinet.hu/fakonyv.pdf>