



Education for sustainable development in schools

Norwegian Forestry Group develops and provides educational programs to support the process and understanding of sustainable development for primary and secondary schools as well for the public. The programmes are established to increase knowledge of forests and all their benefits and deepen the understanding of it among young people. Our partner, Forestry Extension Institute, have for more than 30 years developed educational programs. The programmes reflects all the functions forests fulfil for people; cultural, ecological, economic and social. Understanding the balance between those uses is crucial when studying how humans interact with forests.



Education and tree planting activities, Senegal

Objectives

During co-operation with local stakeholders, we develop programmes with educational activities adapted to the local needs of children and their educators and that are suitable for the local school curriculum.

Target groups

Schoolchildren and their families. Teachers.

Participatory approach

It is important to engage all stakeholders. Direct target groups and final beneficiaries have to be involved in testing out activities in the programme. All activities should be adapted to the local needs in such a way that gaps in knowledge, attitudes and practices can be assessed and identified.



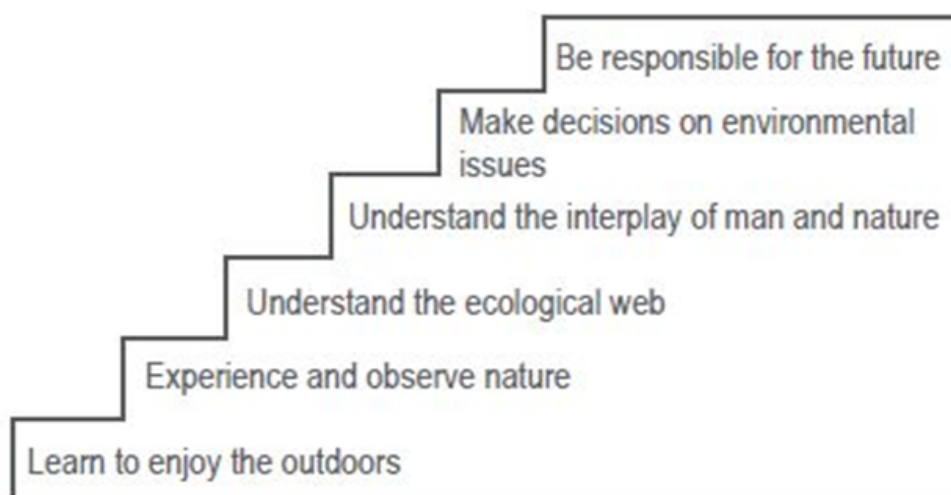
Basic philosophy of programme establishment

To achieve the main principles of pedagogy it is a need of setting up basic frames of the programme. These frames also describe what is needed to deliver environmental education for sustainable development (ESD) with real changes in behaviour and attitudes amongst the participants. The standard describes six steps of pedagogical approaches related to all activities. The six steps need to be repeated on different age of participants. Relevant activities suitable for all steps must be identified related to age of participants and local forest conditions and relevant issues.

Involving the local school and the young generation. Mauretania.

All activities should always follow the pedagogic steps in environmental maturity;

Pedagogic steps in environmental maturity



Pedagogic stairs describing the development of students' environmental maturity.

Step 1: Learn to enjoy the outdoors

To learn to enjoy outdoor activity is a practical sensitivity training. This means to have positive experiences and to develop a positive attitude toward the environment. This step is the most important level to start tuning your heart and feelings towards outdoor activities and to gain a general curiosity about nature, nature processes and human interaction with forests.

Step 2: Experience and observe nature

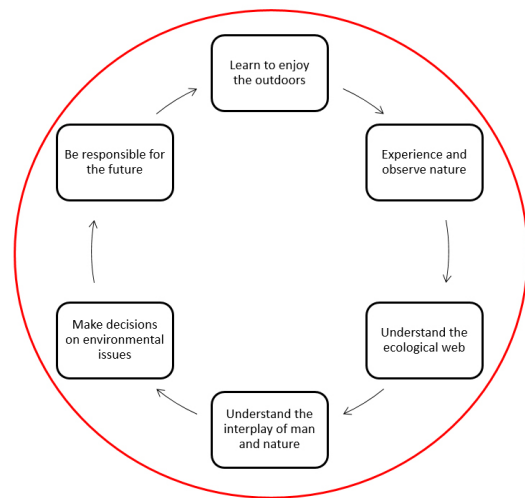
To experience and observe nature is important to become familiar with nature's systems and different species. When doing observation activities in forests you will also get experience and personal relations to these issues. This knowledge does not change behaviour, but provides us with a better basis for reflections and personal adaption of behaviour.

Step 3: Understand the ecological web

Learning about the ecological web is of importance to understand the interplay in forests. The knowledge and understanding of ecological interplay between single species, within different ecosystems and within bigger areas with many specific structures leads to a better understanding of nature's processes.

Step 4: Understand the interplay of man and nature

Understanding the interplay between humans and forests is crucial for understanding the potential conflict of interests that exist between different stakeholders. That is why the LEAF programme works with all aspect of the relationship between nature and people. The programme reflects all the functions forests fulfill for people; cultural, ecological, economic and social. Understanding the balance between these perspectives is crucial when studying how humans interact with forests.



The steps can be repeated several times, but for each time the experience will advance, the knowledge increase and the horizon expand.

Step 5: Make decisions on environmental issues

When understanding the interplay between forests and humans we can identify topics where there are conflicts of interest. To work towards an understanding of the background on different views gives the possibilities to make better decisions and take alternative actions. Skills for asking good questions are crucial to collect knowledge and reliable information. With a wide range of knowledge covering different perspectives, it is possible to work seriously with the conflict of interest between different opinions and to make up one's own opinion based on reliable information.

Step 6: Be responsible for the future

In order to increase environmental awareness it is crucial to have an understanding of what sustainable development actually means, and what one self can do about it. Each individual are responsible for his or her own actions. Based on education and knowledge, modern citizens can make well-founded decisions to maintain and improve on a sustainable living. Working on responsibility issues spreads knowledge and

Organizational setups

An important part of the program will normally to identify and develop a National Institution/Coordinator of the program. This body will in the long run be responsible for developing and implementing the program activities and coordinate inputs at the national level, provide inputs to the programme, follow up trainers, provide training manuals and educational materials, instructors' manuals, curricula, time schedules, audio-visual aids, booklets, etc., arrange and accomplish instructor course for trainers (authorization). Provide periodic reports and assess reports from local networks.

References / ongoing projects

Leaning About Forests , international programme Director	20 countries	2007-2013
Forestpedagogics.eu, member of steering group	European countries	2008-
Panasonic planting programme	80 countries worldwide	2009-
Forests and schools - the balance of wood	Norway, Latvia, Lithuania	2009-2010
School forest network, biodiversity and CO2 reduction	Norway, Russia	2009-2010
Modern citizens towards a sustainable future	Norway, Iceland, Latvia, Lithuania	2011-2012
European climate education	15 countries	2011
Nordic climate education	Nordic countries	2012-2013
FEE Global Forests Fund	More than 20 countries	2008-2013
Four Sigma Foods tree planting	Russia	2013
Earth day network	Norway, Russia	2013-

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