

## Finland

### “Model Vihti”

*This model, which is used by different primary schools (most students aged 7-12) and some pre-schools, has the aim to foster sustainable attitudes and an understanding of processes involved in the production of food by means of nature-connected education. Activities involve working in the school garden (children plan the season, grow plants, gather yield, etc. and products are later used in everyday school life), school-farm collaborations during which pupils and teachers work on different tasks on local farms, and learning in nearby forests (e.g., about forestry, water systems, climate change, but also first aid, making a safe fire, etc). The school cooperates with parents and community experts like hunters or nature protectors. Positive outcomes of these projects are feelings of community between the school and its neighbourhood, and students deepening their knowledge with hands-on experiences.*

**Main focus of Innovation:** TEACHERS, CONTENT, RESOURCES, ORGANISATION

**Other keywords:** blended/non-formal, learning space

#### General Information

**Name of the ILE:** “Model Vihti” – school garden, farm, forest and environmental art education in everyday school work. Local collaboration between schools, Vihti Municipality, parents, NGOs and farms and people to create sustainable learning environments outdoors.

**Location/Address:** Vihdin malli - Model Vihti, Käpykylä, Vihdintie 7, 03400 Vihti

**Website:** [http://www.vihti.fi/palvelut/koulut\\_ja\\_opiskelu/prime100.aspx](http://www.vihti.fi/palvelut/koulut_ja_opiskelu/prime100.aspx)

**ILE submitted by:** Vihti Municipality

**Rationale**

*Why do you suggest that it should be included in the project? How does it respond to 21<sup>st</sup> century learning challenges?*

The modern era fails to provide children with hands-on experiences of nature, forests and basic everyday knowledge of food production. This may lead to severe implications in the future. Sustainable development to be carried out by adults without skills and understanding of nature and primary production is a self contradiction and obviously unsuited to reach goals of sustainability.

Development project "Model Vihti" is a complete model to enlarge the learning environment outside of classroom. At the moment it has been built to serve all primary schools in Vihti and serves as well the day-care and pre-school children in same schools.

This ILE is a learning organization led by project facilitators in collaboration with schools, all main officials in Vihti Municipality (youth and leisure, culture, environment, education and pre-primary education) and local NGOs such as 4H and The Martha Organization.

The approach in "Model Vihti" is to build up a learning environment outdoors to be in function year by year without special funding or fees, to be a part of everyday school work year around in all seasons.

**Evidence**

*Is there any evidence or indications showing that this initiative achieves the outcomes that it is aiming at?*

Teachers' interviews and surveys from the pilot phase show clear evidence of the positive results on the seminar report by FK Panu Huuhtanen. There is as well research for doctoral thesis by Kirsti Salo concerning the gardening aspect in this model: Learning by gardening in "Model Vihti" - local possibilities to enlarge learning environment in primary schools. Unpublished data show teachers' attitudes (surveys) and pupils' hopes and feelings (mind maps, writings and drawings) for gardening as a part of every day school work and curriculum. Mirva Lindfors is making her thesis: Public catering from the perspective of Sustainability in elementary schools and in Steiner schools in Southern Finland. Haaga-Helia University of Applied Sciences.

**Learning Aims / Intended Learning Outcomes of the ILE**

*What are the core learning aims and which knowledge, skills or attitudes are to be acquired? (These may include outcomes related to learners' social, interpersonal, or meta-cognitive development)*

This ILE has strong aims to give children better possibilities in future for sustainable attitudes in adulthood to deal with everyday life: learning by doing and by experience gives meaning for academic lessons in classroom. Learning outdoors is a holistic process with an urgent need to collaborate with other students e.g. in garden, farm or forest. The hands-on education gives children skills and knowledge to understand deeper meanings of the knowledge learnt inside and from the book.

Environmental settings nearby school include the social contacts with people living and working in the neighbourhood of school, to give a new approach to learning. Social capital is emphasising the communality capacity by this ILE.

**Learners**

*Which group(s) of learners is it aiming at? Who is eligible to take part? How many learners are there? What are their ages?*

The ILE is aimed for all schools in Vihti and to the day care in school sites. The learning environment outdoors is important as well for the after school activities organized by municipality for 1-2<sup>nd</sup> grade children. It means age of 3-12 years in some schools but mostly age 7-12 at the moment. The model is possible to have in action as well for the age groups of 13-18 years but this project stage is mostly working with primary schools grades 1-6.

All schools in Vihti (15 schools different sizes and pedagogical back grounds) are eligible to take part.

The pilot schools started already 2003 in first stage of the Vihti model, called "Evergreen skills": Nummela school 550 pupils' 1-6 grades, Ojakkala School and day care 250 pupils 1-6 grades, Haimoo School and day care 1-6 grades 94 pupils, St. Martin School and day-care Pikkulyhty 45 pupils.

New schools (started autumn 2008 in "Model Vihti"): Jokikunta school 52 pupils, Vanjärvi School and Daycare 43 pupils, Oinasjoki school 41 pupils, Pappilampelto school 420 pupils.

Altogether in these eight schools active at the moment are studying 1480 pupils, total amount of school children in Vihti is approx. 3500 in 15 schools.

Furthermore we have teen age youth participating to different kinds of summer camps, as camp tutors and in education. They have for example a course in gardening and they take the responsibility of the summer care of school gardens during holiday season. In the future teens will also join the art education for example in organization of environmental art workshops.

**Facilitators**

*Who are the teachers/facilitators? Who are the leaders? What are their professional backgrounds? What are their roles?*

"Model Vihti" has its roots in NGO work by Vihti 4H- association. International 4H-motto is learning by doing and the four H mean: hands, head, heart, and health.

The facilitators have been working with this development process from the beginning 2003 and still continuing. New forces are coming along. The most important factor in Model Vihti is the "leading" teacher or principal in the school, the process goes on with minimum output from project facilitators when teachers and principals have got the idea to every day school work.

The leader of this project financed by The Finnish National Board of Education (FNBE) is Marjo Ojajärvi, the leader of education and culture of Vihti Municipality. Part time project leaders and facilitators working for "Vihti Model" are Mirva Lindfors, director of Vihti 4H-association, she has the responsibility of local collaboration and management, Marianne Mäkinen, programme manager has specialities in information and contacts to school and Kirsti Salo, M.Sci (hort) PhD student has expertise in research and in gardening. All the workers take part to planning and guiding school-farm days, forest days and gardening when necessary. Teachers' training and contacts with schools are divided equally as well.

Examples of schools co-working in Model Vihti:

Jokikunta School and "The Secret Garden"-project:

"The School of Jokikunta is a small school with 3 teachers, 52 pupils. The whole personnel are very committed to the project as a part of "Model Vihti". The Secret Garden project is leader Principal Esa Kukkasniemi. The local farmers and the local women's Martta society are co-operating with the project.

(Martta society is a national society of mainly women who concentrate on the home and economics and they also cook and preserve food in a traditional way and give food advice).

The main aims of the project are 1) to bring the old teachers' plantations of the school garden back to life 2) to strengthen the feeling of community between the village of Jokikunta and the School of Jokikunta 3) to maintain and develop the flowerbed of the school 4) to give the pupils experience in gardening and ecological way of life 5) to utilize products from the own garden in everyday school life.

One aim is also to broaden the project over the traditional subject boundaries. The name Secret Garden was invented to stimulate the imagination. We have written fantasy, we have drawn and we have made music about the Secret Garden.

We have also used the Internet site of our school to publish photographs, short films and different kind of data about the project. We plan to publish also children's stories and drawings on our site.

St. Martin School – Rudolf Steiner School in Vihti

"Our school was founded by parents who wished to have Waldorf-education for their children. The school started in August 2003 with one class. Now there are three combined classes and 33 pupils.

As we haven't got any state subsidy yet, the school is mainly financed by the parents, which means considerable work in raising money. The parents organize fairs and bazaars and catering three or four times a year and keep an eco-shop at school.

As we are in the countryside, in the middle of a village, we have the advantage of having nature – a lake, forests and hills –nearby. In addition to that we have still some farmers living at a walk's distance. We have considered it very important for the children to develop a near contact with nature and with the earth, plants and animals as well, especially at this time when the various electronic devices and plays allure the children into a virtual world.

In our efforts to emphasize nature connected education we have received great help from the 4H – association in Vihti, as we could participate in the project of "Evergreen Skills" and "Evergreen Wings". We could go on various excursions to exhibitions of farming and gardening as well as to forests and lakes further away. Our own garden in the school yard with beds for vegetables, herbs and flowers could be founded and cultivated ever since by the help of the 4H. The co-operation with a farm could get started. Every third class has a special theme of agriculture in the old days: they sow the grains of wheat on the soil after ploughing it with a plough drawn by the horse on that farm. The children then follow the growth of the crop, harvest it by the hand with sickle and scythe, grain it and at last bake bread out of the flour."

In this way – learning by doing – the 9-year-old children get respect for their daily bread and an everlasting memory of the process. In our pedagogical view it is very important to give the school children experiences of practical work. Thus one of our subjects is gardening throughout the school and especially in the 6th-9th forms. Our school-kitchen also profits from it, as it only provides vegetarian food from ecological cultivation. In our school sustainable agriculture and sustainable way of living are everyday-life. We wish to awake a sense of responsibility of each individual in front of the challenges of the time."

### **Organization of the ILE**

*How is learning organised? How do learners and facilitators interact? What kind of pedagogy do they follow? What curriculum is used?*

The core of learning is based on school curriculum; "Model Vihti" is giving new possibilities to organize learning for children. The interaction occurs between project leaders and teachers directly, learners can count to be all the participants: children, teachers and other persons working in schools, project facilitators as well the officials in Vihti Municipality and local NGOs building up different every day settings and special happenings. "Model Vihti" means a holistic network for schools to improve the learning and well-being of children and to give better working motivation for teachers and other personality in schools as well.

"Model Vihti" follows the mainstream education in Finland, the national framework of curriculum. In Vihti this framework is written in local possibilities and schools have their own expressions to deal the curriculum. "Model Vihti" helps the schools have a different place and space for teaching and for learning. One of the pilot schools is a Steiner pedagogy school St. Martin School and it gives new approaches for the mainstream schools as well. "Model Vihti" acts here as a real local learning organisation.

### **Learning Context**

*In which context does learning take place? What does the physical learning environment look like? Are community resources used to facilitate learning and how?*

"Model Vihti" enlarges the learning context out of class room into the nearby environment. It works as well with nature based environmental art education in these physical environments. The main parts in model are: 1) School garden, 2) Farm (as nearby the school as possible) 3) Forest and the water areas around the schools, incl. parks etc.

1) All schools have a small garden plot to cultivate; mostly it is used by the 3rd grade by spring time: planning the next season, growing plants indoors, preparing the soil, planting and sewing seeds before school holidays. In the autumn the same children are on 4th grade and they pick up the yield and prepare the soil for winter time. This garden is in wide use for all classes and subjects in curriculum by other grades of the school.

2) School-Farm collaboration means possibility to work and learn in the farm. Pupils are divided in groups with different tasks to be useful for the farmer: cleaning horses' boxes and equipments, doing the work needed at the moment like carrying firewood's to storage etc. Children learn how much is needed to produce food, how nature is playing part in every stage in cultivation and agriculture, their work is important and meaningful, children and teachers and farmers get feelings of success and learn to work mutual together.

3) Nearby forest is a place to learn the basics of forestry in Finland, the balance of nature, get knowledge of water system, climate change and work towards it in sustainable manners. This part includes as well the principles of first aid, acting in cold circumstances, making up a safe fire in forest, using trangias, the roles of everyman's rights in Finland etc.

In this ILE the community resources (finance and work resources) are widely used from planning to active preparations in schools. "Model Vihti" works in collaboration with all instances in Vihti and builds up network with parents, different NGOs like hunters, farming ladies, 4H, nature protectors, environment art, handicraft association etc.

**History of ILE**

*Who initiated it? For what reasons was it started and with what purpose? Have these changed since?*

The local 4H-association leader Mirva Lindfors developed a project idea about working with primary schools according to the 4H-motto "learning by doing". Is it possible to connect formal and informal learning in everyday school work? What is needed to enlarge the learning sphere outside of the classroom? How is it possible to include hands-on environmental education within the school curriculum?

The development of "Model Vihti" has been going on since The "Evergreen skills" projects started in 2003 with four pilot schools. The first step was to establish a school garden on the school grounds. The project provided the material; pupils, teachers and parents built up the garden plots. The next step was to find a farm nearby the school and facilitate this connection – teachers are reluctant to come out of the classroom, farmers and other experts are reluctant to approach the school! The third step was to explore the nearby forest, lake and river. "Model Vihti" started to develop. Three students have been involved from the University of Helsinki and Universities of Applied Sciences documenting and organizing learning environment and material for learning outdoors.

The development has been continuing all the time from year 2003, all the first four pilot schools are still within and new five schools have started last autumn in "Model Vihti".

**Funding of the ILE**

*How is it funded?*

Vihti Municipality and The Finnish National Board of Education's (FNBE) environment development project funding

**Learning Outcomes**

*What are the learning outcomes achieved by the ILE, including academic, social, interpersonal and meta-cognitive outcomes? How is learning assessed?*

The most important outcomes from this ILE are holistic and meta-cognitive, children learn to justify their own skills and knowledge enlarge thinking to processes about nature, in real nature and have access via hands-on experiences to feelings and deeper knowledge and understanding.

During the years of development of the model, three theses have been published at the University of Helsinki and Universities of Applied Sciences documenting and organizing learning environment and material for learning outdoors. One doctoral thesis is coming from the garden activities in this model.

**Documentation describing or evaluating the ILE**

*Is there documentation on this learning environment? Is there a website? Films? Research reports or evaluations? Other forms of documentation? (please supply references or links)*

Website in Finnish: [http://www.vihti.fi/palvelut/koulut\\_ja\\_opiskelu/prime100.aspx](http://www.vihti.fi/palvelut/koulut_ja_opiskelu/prime100.aspx)

Documentation: (for your information) we have: "The Secret Garden" - Salainen puutarha PowerPoint, "Vihdin malli"-hanke PowerPoint, Living learning -video from Norway (translation in English), "Model Vihti" DVDs: Puutarha-Learning by gardening, Maatila-Learning by doing ja Metsä-Learning by living Materials are in Finnish expect the video from Norway.

Thesis: Terhi Kaskioja: Tree Species-Board for the Education purposes of Primary School.HAMK University of Applied Sciences, Evo.

Anni Hjerppe: Forest Section of the Environmental Education Operation Model - "Ikivihrein siivin" - Development Project/ HAMK University of Applied Sciences, Evo.

Panu HUUHTANEN: Ulkona sijaitsevat oppimisympäristöt perusopetuksen kestävä kehityksen kasvatuksessa  
University of Helsinki, Dept. of Biological and Environmental Sciences

### **Other information you consider to be relevant to describe the ILE**

"Model Vihti" has close contacts with Norwegian Living learning-concept ([www.livinglearning.com](http://www.livinglearning.com)) in collaboration with researcher, PhD student Linda Jolly and Professor Erling Krogh, University of Bio Sciences, UMB. As well "Model Vihti" has been taking part and been introduced in European Cost-actions conferences and working seminars:

Cost E 39 Urban forestry and human health and wellbeing. Conference Hamar, Norway August 27-30th 2009, oral presentation by Kirsti Salo: "Model Vihti" - school garden, farm and forest in everyday school work. Learning by gardening - local possibilities to enlarge learning environment in primary schools.

Cost 866 Green cares in Agriculture. Conference Wien, Austria 2007. Conference participation Kirsti Salo.