

# School & Garden

## Evidence based developments of a healthy open and green schoolyard\*

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## Background

Children today have few opportunities for outdoor activities and lack of regular contact with the natural world. Healthy and restorative places in cities gain importance. And there is a growing interest in transforming schoolyards from barren areas into well designed green places which foster:

- Stress recovery
- Exercise
- Social contact
- Personal development

Such a schoolyard was developed since 2002 at the HIB, a viennese public school which offers different programmes (arts, ballet, music and modern languages). More than 400 persons participated in the development of the school garden up to now to realize a green schoolyard that can serve as:

- Learnscape
- Art exhibition space
- Place for leisure time activities

## Objectives

- Evidence based development of the school garden
- Basic research on human - environmental interaction
- Innovative forms of communication and co - operation between researchers, pupils, staff and the public

## Methods

A strictly participatory approach with pupils and teachers as partners during the whole scientific process, from the planning of the project, organisation of the research process, data collection, data processing, discussion of results to the communication of the findings.

Joint studies in several fields of research:

- Post occupancy evaluation (POE) of the school garden
- Analysis of the garden's outdoor environmental quality (air quality, noise)
- Analysis of several juvenile health parameters (BMI, blood pressure, orthopaedic health)
- Investigation of "Connectedness to Nature" as a source of wellbeing and vitality (below the age of 18)

## Outcome

- Scientific underpinning of the development of the school garden
- Empirical findings concerning human - environmental interaction
- Enhance both children's academic and environmental education
- Gender - specific approach in order to improve girls' science education and to get boys familiar with social sciences
- Personal growth through REC in the garden
- Sense of delight, enjoying scientific endeavors

## References

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## School Garden 2002-2007 Participatory Development



Participatory Planning Process



Pupils' needs



Garden models



Opening ceremony, October 2007



Status quo, February 2008

## Forthcoming: REC



Model for co-operation