

# The Green Schoolyard Evaluation Tool

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## How to design a green schoolyard that optimally promotes child development, biodiversity, and climate resilience?

Together with various partners from practice and science, researchers at Vrije Universiteit Amsterdam have been studying how to design a green schoolyard that optimally promotes child development, biodiversity and climate resilience. This study had led to the **"Green Schoolyards Evaluation Tool (GSET)**.

A first draft of the GSET was developed based on existing assessment tools and literature. The GSET was further developed through a Delphi study in which Dutch academics and practice and policy experts were invited to participate in online surveys. For more information on the development of the tool, please see the published [scientific article](#).

The GSET was developed to support schools, designers, landscapers, and other stakeholders in designing green schoolyards that optimally promote child development, biodiversity, and climate resilience. The GSET can also be used to evaluate the design of green schoolyards.

The GSET consists of the following three products:

- 1. Green Schoolyards Evaluation Tool (GSET):** this product provides an overview of 20 items divided into 5 categories that a green schoolyard should possess to support child development, biodiversity, and climate resilience. The GSET can be used:
  - a. To support the design of green schoolyards: it can serve as a guideline, checklist, or source of inspiration for schools, designers or others involved in the design process.
  - b. To evaluate the extent to which current (green) schoolyards contribute to children's development and to the biodiversity and climate resilience of the school environment.
- 2. Scientific Justification Green Schoolyards Evaluation Tool:** this product shows the scientific foundation for each item. It also describes whether the item contributes to child development (this aspect is divided into the three categories 'varied activities and behavior', 'senses and whole-body learning' and 'recovery'), biodiversity and/or climate resilience.
- 3. Inspiration Document Green Schoolyards Evaluation Tool:** in this product you can find examples/ inspiration for the items included in the GSET.

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# Green Schoolyard Evaluation Tool (GSET)

Assessor .....

Date .....

Time .....

Weather                      sunny                      partly cloudy                      cloudy                      rainy/snowy

School .....

Who uses the schoolyard (lower or upper grades or whole school) .....

Size of the schoolyard .....

## Category 1: Greenery

**1.1 What percentage of the schoolyard consists – approximately – of plantings such as living greenery, flora, vegetation, and plants such as trees, shrubs/bushes, grass(es) and flowers.**

0-20%                      21-40%                      41-60%                      61-80%                      80-100%

**1.2 There is planting on the schoolyard.**

- |  |    |     |
|--|----|-----|
| a. There are trees, these are plants with one or more trunks.  | No | Yes |
| b. There are shrubs or bushes, which are woody plants without a continuous stem that branch from the ground.                       | No | Yes |
| c. There is soil-covering planting, which are low-growing plants and flowers without a wooden stem such as grasses and herbaceous. | No | Yes |

**1.3 There is variety in plantings. Consider, for example, plantings that vary in size, colour, fragrance, texture, with or without berries, deciduous or evergreen.**

- |   |    |     |
|---|----|-----|
| a. There is variety in the selection of trees (at least 3 varieties on a small and 5 varieties on a larger schoolyard). | No | Yes |
| b. There is variety in the selection of shrubs and bushes (at least 5 different varieties).                             | No | Yes |
| c. There is variety in the selection of soil-covering plantings (at least 5 varieties)                                  | No | Yes |

**1.4 The planting on the green schoolyard is not just for decoration. Part of the planting is designed to be used so that children can play in and with the plants.**

No      Yes

**1.5 There is edible greenery on the schoolyard such as a vegetable garden, herb garden, fruit trees or bushes with edible (non-toxic) berries.**

No      Yes

Comments on greenery:



## Category 2: Design

**2.1 What percentage of the ground surface consists – approximately – of natural surfaces such as grass, sand, soil, wood chips/tree bark or shells/gravel.**

0-20%                  21-40%                  41-60%                  61-80%                  80-100%

**2.2 There is variety in the natural surfaces on the schoolyard**

- |   |    |     |
|---|----|-----|
| a. There is grass (artificial grass does not count) | No | Yes |
| b. There is sand (sandpit does not count)           | No | Yes |
| c. There is soil                                    | No | Yes |
| d. There are woodchips or tree bark                 | No | Yes |
| e. There are shells, gravel, or pebbles             | No | Yes |

**2.3 There is a flat surface where groups of children can gather for play and learning activities**

No      Yes

**2.4 There is relief on the schoolyard: there are heights and lows such as hills or pits. This is not relief created by playground equipment.**

No      Yes

**2.5 There are sheltered areas in the schoolyard. These are places where children, out of sight of adults, can withdraw and play autonomously. Examples are bushes and shrubs where children can play in or behind, behind a large tree, or a hut.**

No      Yes

**2.6 There are natural seating places on the schoolyard such as a tree trunk or a boulder.**

No      Yes

**2.7 There are shaded areas in the schoolyard made of natural materials. Examples include trees and shrubs, overgrown pergolas, or a willow hut.**

No      Yes

**Comments on design:**

## Category 3: Play and learning

- 3.1 Children are challenged to move in a variety of ways. There are multiple (at least two different) opportunities to:**
- |                                     |    |     |
|-------------------------------------|----|-----|
| a. Climb                            | No | Yes |
| b. Jump up, over, or down           | No | Yes |
| c. Balance                          | No | Yes |
| d. Swing or rock                    | No | Yes |
| e. Going over (tumbling or rolling) | No | Yes |
| f. Run                              | No | Yes |
- 3.2 It is possible for children to use sand, earth, clay, or loam during play and learning activities. Consider a sandbox or play areas with earth, clay, or loam surfaces.**
- |  |    |     |
|--|----|-----|
|  | No | Yes |
|--|----|-----|
- 3.3 There are natural loose and movable materials whose play purpose is not predetermined, and which can be moved, adapted, modified, and manipulated by children. These include tree trunks, wood, stones, straw, and branches.**
- |  |    |     |
|--|----|-----|
|  | No | Yes |
|--|----|-----|
- 3.4 There are non-natural loose materials or objects whose purpose of play is not predetermined and which can be moved, adjusted, controlled, altered, and manipulated by children. Examples include sheets, fall mats, pots and pans, ropes, crates, steps, tubes, or barrels. This does not include toys such as go-karts, balance beams, or (skippy) balls.**
- |  |    |     |
|--|----|-----|
|  | No | Yes |
|--|----|-----|

Comments on play and learning:

## Category 4: Water

- 4.1 There is a water element that can be used during play and learning activities. These can include gutters, watercourse, water tiles, water bowl, water table, or a water pump.**
- |  |    |     |
|--|----|-----|
|  | No | Yes |
|--|----|-----|
- 4.2 The water element is combined with other natural elements such as stones, sand, earth, clay, or loam.**
- |  |    |     |
|--|----|-----|
|  | No | Yes |
|--|----|-----|
- 4.3 Stormwater is considered on the schoolyard via the following ways:**
- |   |    |     |
|---|----|-----|
| a. The drainpipe is visibly disconnected                          | No | Yes |
| b. Water is visibly diverted by means of water courses or gutters | No | Yes |
| c. Water penetrating surfacing                                    | No | Yes |
| d. Wadi   | No | Yes |
| e. Pond or a ditch  | No | Yes |

Comments on water:



## Category 5: Habitat for animals

### 5.1 In addition to planting and water, there are man-made living, nesting, and hibernation areas for large and small animals such as:

a. Butterfly house	No	Yes
b. Birdhouse	No	Yes
c. Bat cabinet	No	Yes
d. Insect or bee hotel	No	Yes
e. Hedgehog habitat	No	Yes
f. Natural messy spaces or compost	No	Yes
g. Branch fence	No	Yes
h. Bird bath or drinking trough	No	Yes
i. Feeders for birds or other small animals	No	Yes
j. Outdoor enclosure for larger animals	No	Yes

Comments on habitat for animals:

## Overall impression

What is your overall impression of the schoolyard? Give a grade between 0 and 10 and explain why you give this grade.

0    1    2    3    4    5    6    7    8    9    10

Explanation