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## Garden Educator Certificate

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## Basics

- The certification course can be offered by different educational institutions and is aimed at different target groups (age, profession).
- The three modules below are recommended, with the contents mentioned as examples.
- Depending on previous education, individual modules, or parts of them can be acknowledged, e.g., Module 1 for gardeners and Module 3 for teachers.

**Note:** Gardeners do not necessarily have previous knowledge of ecological gardening, such as growing native wild plants, providing nesting aids and food for native animals, working with dead wood, etc. Therefore, taking Module 1 may be a relevant addition for them. The same applies to teachers and module 3.

- We recommend that, if possible, the training ends with a theoretical exam and a practical teaching test with learners.

## Goals & Competencies

- Acquire and apply the basics of organic gardening.
- Designing a garden as a learning and adventure space.
- Acquire and apply the basics of learning and teaching.
- Initiate educational processes in the garden, knowing and considering the special features of the learning environment.
- Know the relevant skills and competencies of Education for sustainable Development (ESD) and implement them in the school garden as a learning environment.

## Modul 1 – Scientific background

Module part	Content
M1.1 - Gardening basics, theory	Terms: permaculture, natural gardening, 3-zone gardening, climate gardening Basics of botany: basic organs of a plant, photosynthesis, reproduction with and without seeds Equipment science, soil + compost, fertilization, cultivation planning, biological plant protection, beneficial insect promotion, crop rotation, good neighbors..., sustainable water management
M1.2 - Gardening basics, practice	Gardening, practical exercises during the year Soil cultivation/mulching, early harvesting, plant cultivation, seeds, bed care, harvesting, berry and fruit tree pruning, propagation (vegetative, generative)
M1.3 - Ecological basics	Food webs in the garden, biotope & biocenosis, disturbance ecology, climate change and adaptation, phenological calendar (indicator plants, changes due to climate change), Discourse: Beneficial and pest, nesting aids/feeding of wild animals, culture versus wilderness
M1.4 - Species knowledge	the most important wild species (plants and animals) in the garden the most important family characteristics Cultivated species and varieties, including trees
M1.5 - Typical elements/biotopes in the school garden and their care	Professional installation and maintenance of garden elements:

Raised beds, ground beds, rainwater collection systems, nesting aids (“insect hotel”, bird nesting aid), compost, pond, herb spiral, wildflower meadow, wild hedge, dry stone wall, dead wood biotopes, fruit trees, etc.

## Modul 2 – Methodology and didactics of garden-based learning

Module part	Content
M2.1 - Relationship child and nature	Environmental psychological principles: contact with nature as a prerequisite for the healthy development of children/young people Negative effects of a lack of contact with nature: environmental fear, nature deficit, slaughterhouse paradox and Bambi syndrome, fear, and disgust
M2.2 - Education for Sustainable Development (ESD) in the garden	ESD: what is it? Possible topics: self-sufficiency, biodiversity, climate gardening and global learning; ESD should not be a discrete topic, but rather mainstreaming. Addressing houseplants/cut flowers in the context of ESD. Consideration of the Beutelsbach Consensus: prohibition of overpowering and indoctrination, requirement of controversy: complex issues are discussed without providing solutions, encourage the development of interests, student orientation.

M2.3 - School Garden as a subject and inclusive environment for learning	(possibly an excursus on historical development and current situation) Potential of the school garden as a learning environment Addressee-related functions and design of the school garden elements for the specific pedagogical and didactic goals (e.g., equipment and space requirements for groups, etc., school garden as a place of constant change, permanent participation, and redesign)
Connection to curricula	Perspective Framework for Teaching of the GDSU Curriculum and educational plans of the relevant (federal) states
Garden didactics	Setting up a lesson in an outdoor area, structure of lessons over the course of the year, suitability of content for age groups
Methods of experiencing nature	Wilderness education (Coyote Mentoring), Joseph Cornell, experiential education
Science learning	Experiments, situational learning, research-discovery learning
Learning documentation	Portfolio, garden diary, project presentation, performance feedback and evaluation
Materials for outdoor use	Clipboards, magnifying glasses, ideas for presenting results in the garden
Outdoor Learning	Individual competence promotion "Classroom Management": conflict management, discipline issues, group dynamics Legal aspects: safety, accident protection, instructions, duty of supervision, health risks, first aid, insurance, hygiene

<b>Further Contents</b>	
Health education in the garden with a focus on nutrition (harvest utilization)	Further processing of the harvest, cooking with children in the kitchen and around the fire, tea making, preservation, herb processing
Designing with natural materials throughout the year	Examples: Garden and bed design, LandArt, floristry, willow cultivation for different seasonal occasions
Winter and indoor topics	Houseplants: climate zones, growing conditions, vegetative propagation, harvest utilization/preservation Experimenting, microgreens, trees in winter
Interdisciplinary educational potential in the garden	especially in the areas of mathematics-geometry, art and literature, language support, bilingual education, inclusive education, technical education
Outdoor learning spaces in the context of the garden	Regional examples of primary learning locations: botanical garden, museum, farm learning location and secondary learning locations: supermarket, organic store, flower shop, hardware store, orchard, place-based learning
Media education in the garden	Nature documentary films, identification apps, garden diaries (analog and digital), nature photography, working according to instructions (recipes, construction, and cultivation instructions), public relations (homepage, blog, posters, etc.)

<b>Organization</b>	
Networking	Local, regional, state, and federal, international associations, institutions, etc. Networks for exchanging experiences and motivational support
Management of a garden as a learning environment	personnel, cooperative, financial, and material aspects Management regarding planning, installation, maintenance, and use Summer holidays, responsibilities Cooperation within and outside the institution (e.g., mentoring)

### **Modul 3 – Educational background of garden-based learning**

<b>Module part</b>	<b>Content</b>
M3.1- Basic conditions for learning	Basic conditions for learning: bonding, orientation, motivation, etc. Maslow's hierarchy of needs
M3.2 - Addressee-related learning	Looking at the age groups and conclusions for school gardening: Which topics? Which methods? What potential obstacles?
M3.3- Pedagogical self-esteem	Classic teaching role versus learning assistant/mentor, self-reflection

#### **Literature:**

<https://www.bag-schulgarten.de/literatur/aktuelle-schulgartenliteratur>