CNL
CultureNature Literacy

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Garden memory book

How do we grow our own food?

The supply of food is particularly important in the Anthropocene, especially in view of the predicted climate change. The idea of the learning scenario is to use classical and practical activities related to gardening to inform, reflect and internalize where food comes from and how it is produced. The topics are organized in the form of a series of gardening activities and the creation of a gardening memory book.

garden, gardening, garden memory book, nutrition

Topic: Garden memory book

Food supply is of particular importance for the Anthropocene, especially in view of the predicted climate change. The question of how to ensure tomorrow's food supply is not only important and relevant today, but also tomorrow, especially as today's children are increasingly alienated and often have distorted and false ideas about where food comes from and what is needed to produce it (CNL & Home Economics Education).

WHAT is it about? WHO is it about?

The aim of this topic, which can be integrated into several science subjects, is therefore to inform, reflect and internalize the understanding where food comes from and how it is produced. This topic focuses on classical and practical activities related to gardening and plant production in the garden. It is presented in the form of a garden memory book. Through this we try to discover classical dimensions of gardens and gardening. The objective is to create something that captures the special moments or occasions in the life of our garden.

What is a memory book? The basic idea of a memory book is to compile a collection of memories as they occured. In most cases, this involves creating a scrapbook. We can determine the concept ourselves, the important thing is that our memory book is the way we want it to be. It can contain photos, texts, newspaper clippings, illustrations, captions and memorabilia. There is no limit or restriction to what we can include in our own memory book.

It can be created on paper or with the assistance of digital tools and programs such as PowerPoint, Padlet, Mentimeter, etc.

The garden memory book focuses on the classic activities associated with gardening: the history of gardening and the comparison of gardening in the past and present, what gardeners need, what plants need, how to grow new plants, how to grow herbs and plant a vegetable garden, whether so-called weeds can also be edible plants (and whether the term weed is still contemporary) and explores what is concealed in the soil. How do you create an annual calendar for gardening activities so that you can garden in all seasons? How can you plant on the balcony, the window sill and in the garden? Which plants can grow together? What life cycles take place in them? As animals also inhabit the garden, what measures can be taken to ensure they feel at home?

Didactics

This learning scenario explores gardening in its connection between people and nature. Learners engage with the topic through experiential learning. They examine the connections between soil, garden organisms, people and society. The individual components of the learning scenario can be utilized independently.

To learn more about strategies that use the garden as a teaching tool, visit the following Cornell University website on garden-based learning: https://gardening.cals.cornell.edu/

WHO is the target group? WHO are possible cooperation partners?

The learning scenario is designed for primary school, but some activities are also suitable for secondary school learners and teachers. Partners are not required for participation. The individual components of the learning scenario can be used independently of each other.

WHY is this topic relevant for CultureNature Literacy? WHERE is it going?

The objectives and skills can be integrated into science lessons, home economics lessons, science-oriented subjects and some social science subjects. The objectives are:

- Encouraging natural curiosity
- Developing the ability to observe and explore nature
- Understanding the relationships between living organisms and their environment
- Learning about organisms and their needs
- Developing sensitivity and respect for all forms of life and the environment
- Learning about and applying selected methods of gardening
- Encouraging and promoting a lasting interest in gardening and food production
- Connecting the garden and gardening with culture, literature and language through metaphors.

The learning scenario is thematically linked to the CNL & Home Economics Education chapter and is based on the GreenComp competences, which emphasize sustainable values, sustainable complexity, sustainable future and sustainable action (Bianchi, Pisiotis & Cabrera 2022). We have emphasized those competencies that are particularly promoted in science education and home economics education: appreciation of nature, systems thinking, reasoning, problem solving, influencing the future, adaptability and exploratory thinking (ibid.). Learners are encouraged to express their opinions and discuss topics during the implementation.

The last part of the learning scenario is dedicated to the cultural and social components of the garden and gardening, focusing on the metaphorical use of the garden to represent life in its various forms and for society.

WHEN, in which period does this take place?

The time frame of the learning scenario depends on limiting factors such as time of year, age, the learning unit to be covered and the curriculum requirements in each country. The learning scenario can serve as a stand-alone lesson, covering topics such as plant and food production, nutrition, ecology, sustainability, etc., either in the classroom or outdoors. It starts with the introduction and planning of the garden, gardening, building a pollinator hotel and a pollinator-friendly garden and ends with the creation of the garden memory book, documenting the individual steps in creating the garden, feelings, events and difficulties.

HOW to proceed?

Step 1: Introduction to gardening

Teachers select a picture book, a book for young people or an adult book in which the garden plays an important role. This is followed by a discussion about the content. Based on their reflections on this source, they plan their garden (as outlined in step 3). The selected picture book or book should correspond to the developmental level and age of the children, young people or adults.

The teacher looks for a source in the language of instruction. Below are some optional suggestions for introductory reading in Slovenian, some of which have been translated into a foreign language:

Picture book:

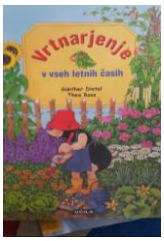
Doria, Julia (2019). *Vrt škrata Avgusta*. Ljubljana: Atelje Doria.
Doria, Julia (2019). *The garden of August the dwarf*. Ljubljana: Atelje Doria.
Sample: https://www.kresnik.eu/skrat-avgust-in-njegov-skrivni-vrt_clanek_2193.html

Book recommendation for young people and adults:

Štaudohar, Irena (2022). *Fižolozofija: čudeži vrtnarjenja*. Ljubljana: Mladinska knjiga.

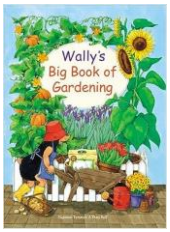
Step 2: We are planning our own garden

Learners or teachers can gather information about gardening from a variety of sources to create a gardening table for their garden. They can search for resources in the language of instruction from a wide range of sources available online, on websites, or in books from libraries or bookstores. One example could be tailored for school children, focusing on basic gardening skills and knowledge.



Dietel, Günther & Roß, Thea (2001). *Mit Waldemar durchs Gartenjahr*. Coppenrath, Münster.

Dietel, Günther & Ross, Thea (2002). *Vrtnarjenje v vseh letnih časih*. Učila International.



Tommes, Susanne & Roß, Thea (2000). Waldemars großes Gartenbuch Coppenrath.

Tommes, Susanne & Ross, Thea (2021) Wally's Big Book of Gardening: Featuring Indoor and Outdoor Projects. Abbeville Press, AbeBooks.

Tommes, Susanne & Ross, Thea (2001). Moja prva knjiga o vrtnarjenju. Učila.

The learners can then draw the garden plan: Close your eyes, imagine your garden and draw it below!

Learners can also use an app to do this: Plan your dream garden and add a handy sprinkler system!

Step 3: Gardens for everyone. Let's plant!

In step 3, it is time to create your own garden. Students or teachers observe the growth of plants. Everyone can decide what to plant: seeds or several types of seeds, one plant or several

plants, one flower or several flowers. The plant material can be planted in the garden, in a pot on a windowsill or balcony, in an apartment or house, in a school, etc. The activities are extended to several weeks and even months, depending on the needs.

Discussions can take place during the process: *Can we help each other with a sowing calendar? How do the plants differ? Which ones grow faster? Which are taller, longer than others? What problems are there? How to water properly?*

The discussion can also include the following: How does heat affect plants? How does the supply of water and light affect them? How does the geographical location (longitude and latitude) of the garden affect sowing, planting and yield?

Step 4: How to create a pollinator-friendly garden

Designing gardens for endangered bees, butterflies and other pollinators is of particular value with the help of an algorithmic tool – Alexandra Daisy Ginsberg's Pollinator Pathmaker (2023), an artwork by the Eden Project, Cornwall, England. Pollinator Pathmaker is a software program that keeps track of pollinators. This tool facilitates envisioning how pollinators perceive gardens and learning more about their plants and how they relate to pollinators. It encourages us to change the way we look at gardens and reflect on who we create them for.

The film by Alexandra Daisy Ginsberg (2021) about Pollinator Pathmaker will be discussed with the students. The key questions are what gardens would look like if pollinators designed their gardens and what people would actually sow from them.

Step 5: We build our insect house

The next step is to build your own insect hotel to provide beetles and other insects with a place to live. The best time to build an insect hotel is in early fall so that the bugs have a place to hibernate. You can use recycled or natural materials: Wooden pallets (these are essential - ask at industrial sites and builders' yards for free pallets!), broken bricks and tiles, stone chippings, broken plant pots, root wood, dry leaves, bark, hollow plant stems, straw and hay, bamboo canes etc.

Take a look at the Eden project website: https://www.edenproject.com/learn/eden-at-home/how-to-build-an-insect-home

Step 6: We create the garden memory book

Now the pupils recall the individual steps and key events when creating the garden. They also describe their feelings and difficulties encountered during the creation of the garden. Photos and notes can be collected and kept in a box – preferably in chronological order.

The garden memory book can begin with the sentences: "My garden is a big book. At the moment it is a blank page waiting for warmer days when it can be started." (Štaudohar 2022; transl. JAD)

The following websites can help you design the book:

- How to Make a Memory Book: https://www.wikihow.com/Make-a-Memory-Book
- What to write in a Memory Book? https://www.memory-books.com/blog/14/what-to-write-in-a-memory-book

WHAT do you work with?

Materials: Picture books, books, manuals, worksheets, videos, websites.

Digital tools: MS Office, Padlet, Mentimeter oder andere digitale Tools.

WHERE does the learning scenario take place?

The learning scenario takes place in the home environment, in the classroom, in other areas of the school, outside the school or in the school garden.

Literature

Primary literature

Dietel, Günther & Roß, Thea (2001). *Mit Waldemar durchs Gartenjahr*. Coppenrath.

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Doria, Julia (2019). *Vrt škrata Avgusta*. Atelje Doria.

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Tommes, Susanne & Ross, Thea (2021). *Wally's Big Book of Gardening: Featuring Indoor and Outdoor Projects*. Abbeville Press, AbeBooks.

Secondary literature

Ambrožič-Dolinšek, Jana; Katalinič, Dane, & Utroša, Patricija (2021). Šolski vrtovi v Pomurski regiji. *Journal of Elementary Education*, 14_3, 303–318. DOI: 10.18690/rei.14.3.303-318.2021

Bianchi, Guia; Pisiotis, Ulrike & Cabrera, Marcelino (2022). *GreenComp. Der Europäische Kompetenz-rahmen für Nachhaltigkeit*. Ed. by Yves Punie & Margherita Bacigalupo, Amt für Veröffentlichungen der Europäischen Union. DOI: 10.2760/13286

Crabtree, Margo (Ed.) (2007). *Getting started: A guide for creating school gardens as outdoor classrooms.* Center of Ecoliteracy.
https://www.ecoliteracy.org/sites/default/files/uploads/gettingstarted-2009.pdf

Ginsberg, Alexandra Daisy (2021). *Pollinator Pathmaker.* https://pollinator.art/

Ginsberg, Alexandra Daisy (2021). Pollinator Pathmaker living artwork by Alexandra Daisy Ginsberg at Eden Project. *Eden Project*. [Video]. https://www.youtube.com/watch?v=IN3YzdziqBY

Notes

Plan your dream garden and add a practical irrigation system: https://www.gardena.com/int/garden-life/garden-planner/

Quality criteria | SDGs

Sustainability: Pupils learn how to grow their own food and recognize the ecological connections in a garden.

Inclusion: Children with special needs are included in all activities. With additional professional support from inclusive educational staff, we can reduce learning deficits.

Digitality: The garden and the garden memory book are created with the help of various websites.

Target group correspondence: The learning scenario is aimed at teachers at secondary level 2 and university teachers of student teachers.

SGD: SDG 4 (Quality Education)

Author

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