

Teaching Materials for Qualification of Specialists in Traditional orchards



**Selection of 40 teaching units
from the associated ESTO-curriculum**

Tested in ESTO - pilot courses



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Introduction

Traditional orcharding in Europe has a long tradition in Europe. In some regions there still exists agricultural models guaranteeing the continuity and development of these hot spots of biodiversity, but in other regions changes in land use, missing marketing actions and the widespread loss of professional knowledge of traditional orchards are threatening their survival. As a consequence, there is a risk of loss of previously acquired comprehensive expertise and knowledge on the different aspects of care and management of traditional orchards due to lack of education possibilities in this field. Comprehensive material, accumulated knowledge of various aspects of traditional orcharding, care and marketing do not currently exist, and should open up new prospects for the future.

To keep traditional orchards as a multifunctional (ecological and economical) sustainable system guaranteeing high biodiversity also in the 21st century, it is important to increase awareness and knowledge about traditional orchards through innovative and new approaches to education and to support transfer of knowledge between experts and networks of public and private institutions and organizations by establishing “competence centres” in EU countries.

Within the framework of the EU project "ESTO - European Specialist in Traditional Orchards" with partners from Germany, Austria, Hungary, France and Denmark, the unique curriculum for the qualification of traditional orchards specialists/experts for Europe was recently developed with the aim of conveying the knowledge of traditional orchards to students and trainees. Another goal was to develop the skills and competences needed to integrate this knowledge and insight in various professional fields. The newly designed modular curriculum for 120-160 units has been translated into 7 languages (English, German, Polish, Hungarian, French, Danish) and is based on the outcome-oriented approach ECVET (European Credit System for Vocational Education and Training), which is defined by teaching units and learning outcomes. In order to assess the knowledge, skills and competencies which are to be reached by students / trainees, a selection of teaching materials has been developed and tested in "pilot orchard schools ". Furthermore, these will be offered and applied at interested institutions such as vocational schools, universities and adult education institutions. These teaching materials include 40 teaching units in the fields of "Pomology, care and management of traditional orchards and processing and marketing of their products." The pedagogical and didactic concept of teaching materials is based on years of experience with a target group-specific education (e.g. consideration of the age groups, level of education, previous knowledge). The methods have been developed as a combination of different pedagogical approaches (e.g. experiential education, design pedagogy, Montessori, Freinet, peer education). A range of creative approaches are used with focus on practical experience and learning. Through this educational approach a very broad target group can be reached. Thus, it is possible that the selected learning contents can be taught in courses for vocational schools and universities, but also in adult education. The teaching materials are related to level 4, but can also be used for levels 3 and 5 (of the European Qualification Framework).

Instructions for teachers and trainers

This educational material is designed for a course with duration of 40 teaching units. There are exercise units that are taught in the classroom as well as outside e.g. workshops, field trip.

In the description of the practice sessions you will find

- learning outcomes to be achieved and the reference to the respective ECVET-sheet
- content of the lesson
- proposed site/location
- best time for implementation
- description of the methods
- required material
- instructions for organisation
- schedule
- worksheets and supplementary material for teaching
- expert texts as technical information for the teacher, or respectively as specialized texts for learners.

The optimal period for the course implementation is September-November e.g. to press apple juice or to have a wide range of freshly picked apples available. If courses take place at a different time, it is necessary to make modified preparations for the successful implementation of training units.

Aims of the courses

The ESTO course aims to maintain the traditional orchards in Europe by training of experts – specialists, which are trained to recognize the value of traditional orchards, are able to maintain and manage them and can market their products.

The ESTO course is built on the ECVET Europe-wide standards that have a learning outcomes-based approach.

Learning outcomes are divided in knowledge, skills and competences. These are measurable, demonstrable and observable. The learning outcomes to be reached by the students / learners in the end of the course on each level are described in each lesson.

After completing a course on a respective level, students can show what they have learnt and optionally enter it in the europass (Europe-wide valid competence portfolio) or visit further courses.

The structure of courses enables continuous and structured learning. It describes what learners know, understand and can apply after the learning process. Furthermore, the methods, processes and materials which are used to acquire the particular knowledge, skills, and competences are described.

An important aspect is a learning atmosphere that enables a partnership between teachers and students, creating collaborative learning rather than pure knowledge sharing.

Methods and didactic approaches

This educational material is designed for a constructivist, multisensory approach and provides options for all types of learners:

- The visual type needs visualization, for example in the form of posters, presentations, leaflets or video clips.
- The auditory type learns best by listening and receiving clear information.
- The communication type learns best by reporting or talking to others, for example role play or group work
- The kinesthetic type learns by doing, trying with own hands, for example using tools by himself/herself.

Since nobody is just one type of learner, the didactic teaching material includes multi-sensory methods designed to optimally support learning. It is best to learn when new information can be processed simultaneously by seeing, hearing, communicating and doing. The olfactory (smell) and gustatory perception (taste) are incorporated into learning.

The lessons are structured so that theory and practice are well balanced. Methods such as role playing provide concrete ways to apply theoretical knowledge and are linked with practical situations.

Start

The most important thing is to motivate students/learners and to keep them enthused. For this reason, even before the course starts, it is helpful to provide clear information about the objectives and requirements of the course, to clarify the expectations and to know about the knowledge and the existing skills and competencies of course participants.

In addition to informing students about what they can learn and be able to do, they should also learn why it is important to acquire these skills, knowledge and competences. Those who recognise the personal benefit are much more motivated. Teachers/trainers should try to adjust course as far as possible to the needs of the learners.

During the course

Always keep the objectives of the course and the lessons in mind. Watch the students and assist them in learning by using a wide range of multi-sensory methods and engage them actively as much as possible.

Encourage the students to work independently on their own projects and work pieces. For example, they can design their own labels for apple juice they have produced by themselves before. This is "learning by doing" and at the same time the demonstration that the learning outcome was successfully achieved.

Support participants in different ways in order for them to achieve their skills, knowledge and competences. The progress in the learning process and the achievement of the learning outcomes can be realised through observing to what extent the students participate in the course contents, reflect, interact with others and work independently.

The real practice is important because students often have none or very little experience with the fruit growing on traditional orchards. Enough time to practice helps to ensure that learning is strengthened. If possible, plan additional practice sessions.

At the end of the course

There are several possible methods to measure learning outcomes. You can see them on the basis of the results of the project work and work pieces and you can also let students themselves reflect on what they have learned in the course and how competent they already feel about it. In the appendix of the educational material you will find a template for a reflection as self-check for students/learners.