Co-funded by the
Erasmus+ Programme
of the European Union

2017-1-ES01-KA201-038199

Virtual Teachers‘ Toolbox
Transferability Guide

# Virtual Teachers' Toolbox

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# About the project

The toolbox is designed to assist teachers in creating distance learning courses. This toolkit is based on the results of an Erasmus + project and combines the experiences from schools of three European countries (Austria, Spain, Italy). Experts included the University of Crete (Heraklion, Greece) and the Swedish Association forDistance Education.

# Project results

The individual project results cover all areas that arise when creating distance learning courses.
A quality framework assists in the planning, preparation, implementation and evaluation of the courses. The E-xcellence framework of the European Association of Distance Teaching Universities was analyzed and adapted for the school sector.

An educational model was developed by the University of Crete and describes the pedagogically sensible recommendations for course development and conduct. The main focus was on active learning, collaborative learning and the use of multimedia content.

One innovation is the self-evaluation mandalas, which have been developed as a motivating tool for learners and to define the competences to be acquired for them.

A MOODLE server was used during the course preparation and was specially designed for use with interactive and multimedia-based materials.

Several demo classes were implemented using the tools developed, tested and available as Open Educational Resources (OER) or published under a Creative Commons license. The courses are intended either as support for learners with low learning levels or as examples for talented students.

The Toolbox itself is a set of interactive web pages that, based on the data entered by the user, provide various information, lists or suggestions for course creation.

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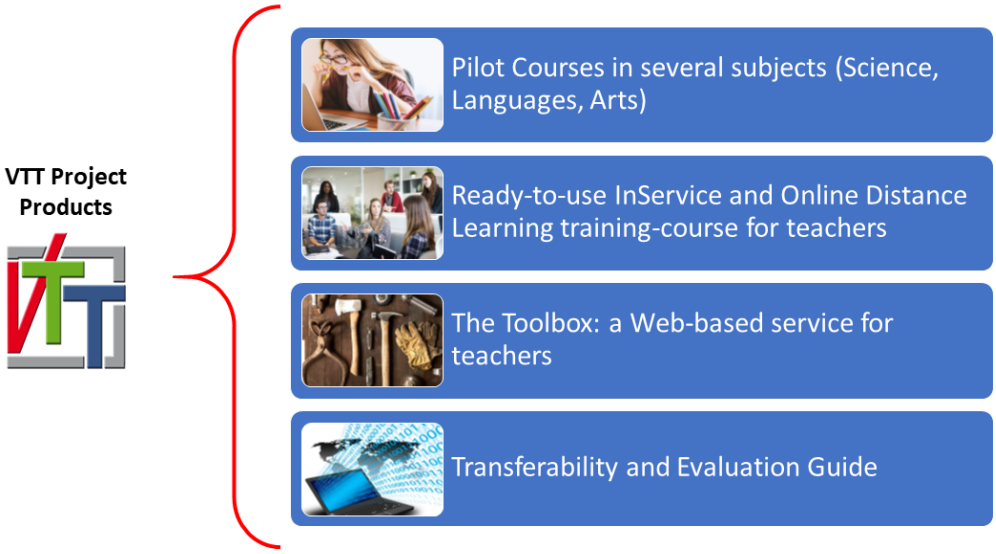
# 1. General Considerations

Success counts, quality matters and innovation wins. Students want to be more successful in their learning and modern teaching methods, such as Distance Learning (DL), help them. Open Online Distance Learning (OODL), which means open, online, flexible and technology enhanced education (OOFAT), as an innovative approach to DL needs a modern pedagogical approach, encompassing quality enhancement framework, and students' motivating self-evaluation methods as well as self-determined learning (called Heutagogy). This approach to teaching helps to support schools to tackle early school leaving and disadvantages.
The objectives of this project were:

1. Practical implementation of **pilot courses** in OODL using an innovative learner-centered pedagogical approach (including a quality enhancement framework) and an innovative motivating self-evaluation tool for students (Mandala self-evaluation) to increase students' learning success.
   **Mandala self-evaluation** is an absolute innovative element in teaching, as well as the developed pedagogical and embedded quality enhancement framework.
2. Create a ready-to-use InService and Online Distance Learning **training-course for teachers**. This course offers work methods and resources for all kinds of educators and offers a promising way for digitization of quality learning content and promoting the use of ICT as a driver for systemic change to increase the quality and relevance of education. This is another Intellectual Output (IO).
3. Through the project a **web-based service for teachers** has been developed to support them best with a sophisticated tool to use the pedagogical framework based on an innovative learner-centered approach including a quality enhancement framework (as described later).
   Implementation of student-centred and problem-based active and authentic learning using multidisciplinary and an interdisciplinary

approach are a crucial issue in this development. This is the main intellectual output and provided as an OER.

4. A **Transferability and Evaluation Guide** enables the transfer of the developed products to other educational sectors (Adult Education, Higher Education).




# The idea behind the project

Distance Learning – as a part of Blended Learning – is a standard approach to teaching in today's schools. The observation of the development of distance learning in various schools in European countries left the impression of missing digital competences of both teachers and students, missing pedagogical approach for efficient and a happy kind of learning. The same way, obviously the motivation of students was less.
During the lifetime of this project various courses in different subjects have been developed and tested. They all use the same approach based on four different cornerstones.

1. **Technology Enhanced Teaching - Use of technology:**
   Distance learning uses technology – students are interested in modern

communication technology. So, the first cornerstone was the intensive use of technology in teaching and learning.

2. **Activities and active learning to promote sustained learning:**
   Active learning and active teaching methods care for more sustained learning results. The developed pedagogical approach takes this into account.
3. **Multimedia and interactivity in teaching:**
   Students like multimedia. Interactivity during the learning process cares for more robust and sustained learning success.
4. **Self-evaluation:**
   The use of the Self-Evaluation Mandala provides an innovative approach to self-evaluation and works as a motivating tool for the students.

# Opportunities and chances

The project results offer a lot of opportunities for future teaching and learning.

1. **Enhancement of the teaching:**
   This means a „teaching more into the depth" and produces longer-lasting learning results. The use of technology combined with multimedia-based content and interactive resource makes learning more interesting and satisfying for the students. This results in better learning outcomes.
2. **Switch from ex-cathedra teaching to self-responsible learning** (in the distance learning with a learning platform):
   The shift from teacher centered learning to learner-centered learning, where the students take the responsibility for their learning, creates better learning outcomes.
3. **Make teachers feel important and involved when asked to adopt an innovation** (teachers typically progress through the stages as they become more familiar with the innovation).
   The more intense concerns teachers have at the lower stages, the more likely they will be resistant to implement the innovation.

# Feedback from partners

The students taking part in the pilot courses were asked for their experience. The feedback from the Austrian school was positive and the students stated that this kind of learning suits them. The use of multimedia-based content and the integration of interactive material or virtual labs was especially appreciated by the students. Moreover, the students see an advantage in the use of the self-evaluation mandala as a tool to know about the taught competences and the easyly done observation of the learning success by comparing the two self-evaluation mandalas.

For the Italian school, the feedback is positive too, students felt more autonomous and self-aware in their learning process, supported by the mandala, this new tool, that let them understand which strategies they could apply to improve. Finally, they had great fun, because they learned with a digital approach, which is much closer to their generation.

In spite of the lack of maturity seen at the beginning in the Spanish students, the use of interactive activities helped them to achieve the main goals of the e-learning project. The students found the courses very useful and rewarding since using forums enabled them to share their opinion with the rest of the class, they all could see the points of view of their peers and they had plenty of ideas they used in the compulsory exams they have to do to enter university. The students were very involved in the project and enjoyed it very much.

# 2. School Education Vocational School

This is a short chapter and summarizes the experiences from the pilot courses. The special focus should be laid on vocational (oriented) schools or schools with some vocational background. Therefore, this chapter could reflect the experience from the pilot courses.

## Use of the Mandala

1. Use of the Mandala in Vocational Schools
2. Bring teachers to define the taught competences more precisely
3. Feedback from students and their estimation of the usefulness of the Mandala (if possible - positive feedback)

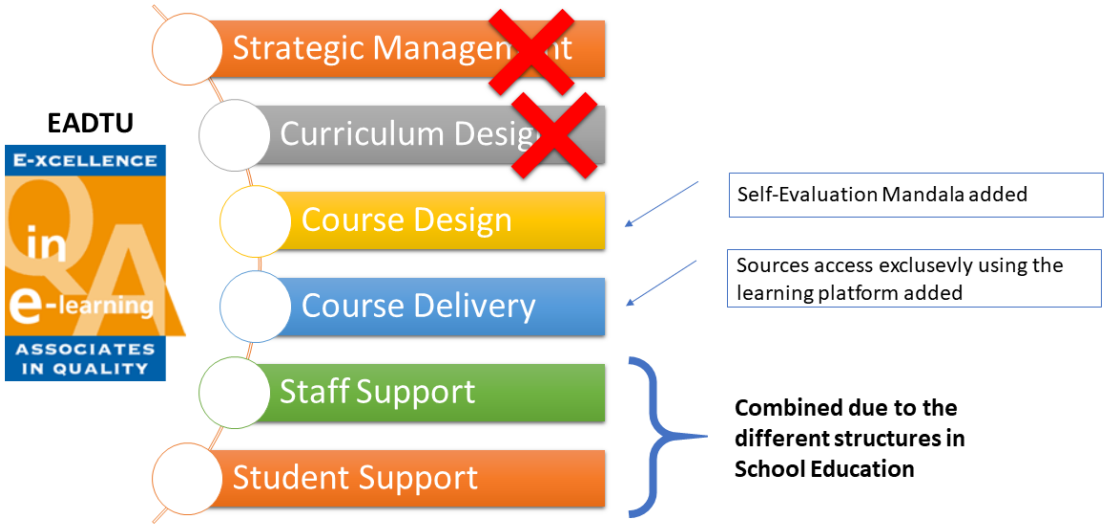
## Quality Framework

The quality framework for the VTT-project has been taken, with the agreement of the EADTU, from the E-xcellence framework developed for Distance Learning on Higher Education level.
The used Self-Evaluation Mandala enhances this framework by defining the taught competences. The compilation enhances also the quality framework by concrete definition of the learning content and the feedback of the learners about their pre-conditions.
The e-xcellence framework focuses on the 6 different fields, 4 domains have been taken into account (where two of them focusing on student and staff support have been put together).

1. Strategic Management
2. Curriculum Design
3. Course Design

4. Course Delivery
5. Staff Support
6. Student Support

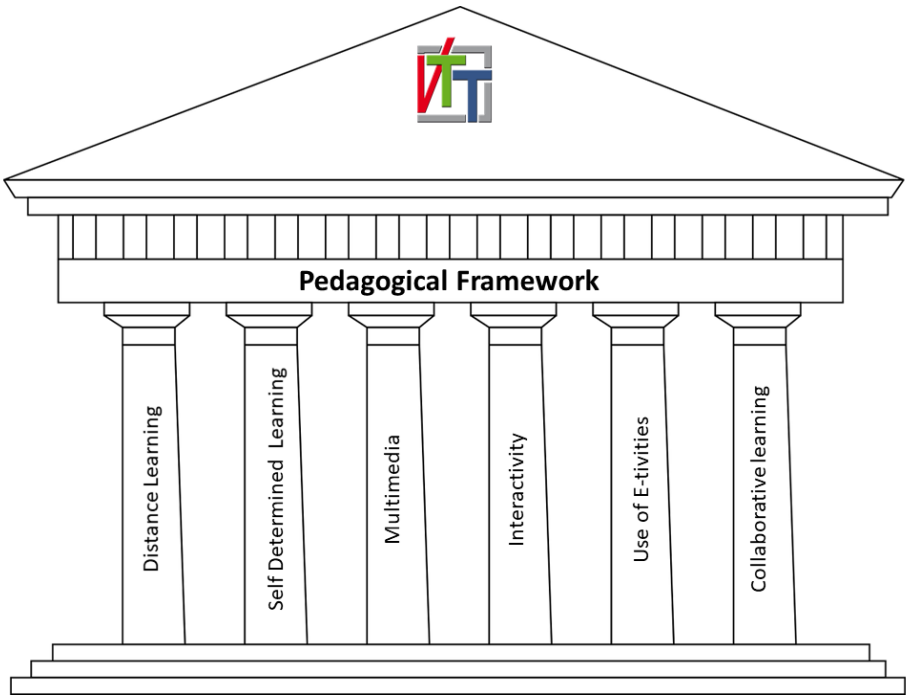
The graphic makes the enhancements visible:




**Graphics**: Use of the e-xcellence framework (of the EADTU), Peter Mazohl (2019), CC 4.0 by-nc-sa

# Pedagogical Framework

The Pedagogical Framework is 1:1 compatible with the developed framework. The framework (in original version) can be downloaded from the webpage of the project.
Link: https://www.vtt-box.eu/project/download/197/
The framework is based on self-directed learning, active learning, the use of e-tivities and the integration of the (competence-based) self-evaluation Mandala. Multimedia and interactivity are important columns in the building of the framework.




# Differences in VET schools

The **VTT-Box** focuses on **School Education** in traditional grammar schools (or similar schools). The pilot courses have been implemented in language and science subjects and in arts education.
Typical subjects in Vocational Education Schools, like accounting and balancing, can use the developed frameworks for distance education as well and in the same way as in the pilot courses. Specific activities, like practical work, cannot be done. All other activities depend on the selected structure of the course, the assignments and the necessary software as well as on the assessments.

# 3. School Education - standard schools

The teachers' toolbox and the developed results can be taken as they are 1:1 to schools which are similar to the schools running the pilot courses.

# Use of the Mandala

The use of the Mandala is a cornerstone in the development of VTT Distance Learning courses.

# Quality Framework

The quality framework for the VTT-project has been taken, with the agreement of the EADTU, from the e-xcellence framework developed for Distance Learning on Higher Education level.
The used Self-Evaluation Mandala enhances this framework by defining the taught competences. The compilation also enhances the quality framework by a definition in particular of the learning content and the feedback of the learners about their per-conditions.
The E-xcellence framework for quality in open online, distance and blended learning focuses on six different domains, four domains have been taken into account, while the other two, which focus on student and staff support

have been put together. The six fields are listed below with some comments.

1. **Strategic Management**: This is normally given by the school authority and in most cases, cannot be changed.
2. **Curriculum Design**: This is normally given by the school authority and - in most cases, - cannot be changed. Schools sometimes have the possibility to put an emphasis to one or more items listed in the curriculum. This gives the chance to offer deeper insight into specific chapters, for example for a group of gifted learners.
3. **Course Design**
4. **Course Delivery**
5. **Staff Support** and
6. **Student Support** is put together in the project due to the typical school environment. Many schools in Europe do not have the technical staff for the support of teachers and learners. This forces the teachers to take over this role and care for the mentioned technical and logistical support for their learners. In cases of deeper going technical problems, schools often have the option to outsource the technical problem solution to an external company.

# Pedagogical Framework

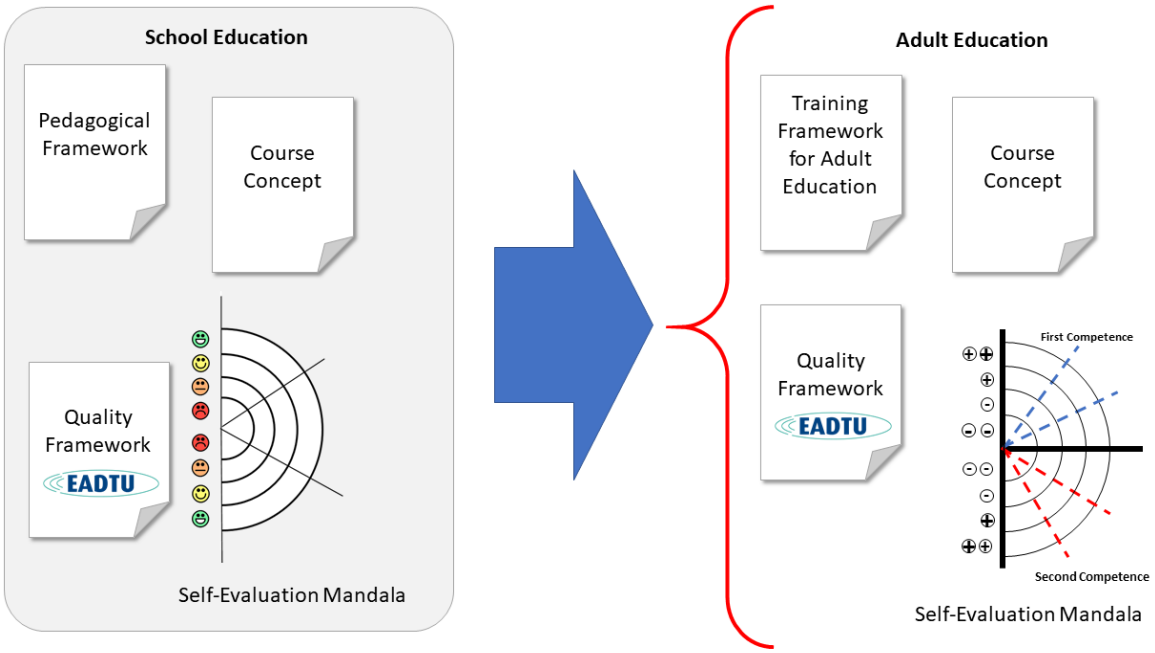
The pedagogical framework developed by the University of Crete covers the complete learning and training scope for the development of high-quality distance learning courses.
The framework can be downloaded from the project's webpage.
Direct link to the document: www.vtt-box.eu/project/download/197/

# 4. Adult Education

This chapter summarizes the experiences from the pilot courses and the feedback of the involved teachers. The special focus in the transfer of the VTT-Box results to Adult Education is put on the basically differences to School Education:

- The age of learners is not as homogenous as in School Education, this is valid for the pre-knowledge as well
- The motivation of the learners is different
- Adults learn by their free will
- Adults learn of interest
- Adults don't have "learning" as their main job

This transferability map shows the similarities and the differences between these two fields of education.

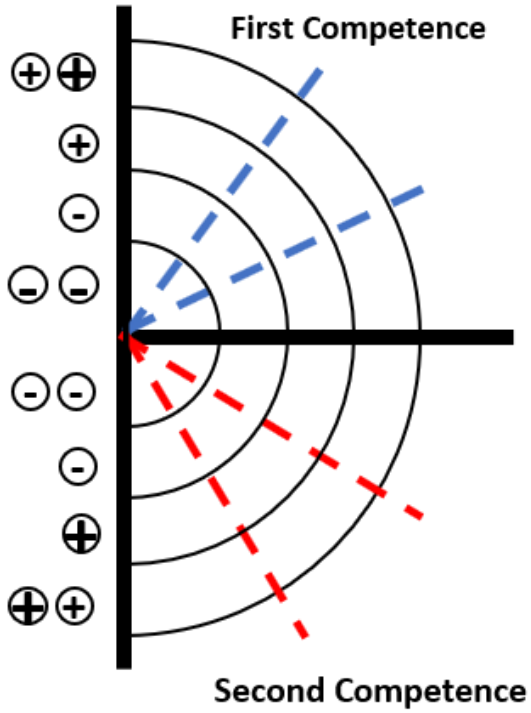



# Use of the Mandala

The self-evaluation Mandala can be used in Adult Education as well. Since the developed courses are small and focusing on one competence these courses could be enlarged in Adult Education and contain more than one competence. During the lifetime of the project a model of the Mandala has been developed covering two competences. This can be managed easily and should be taken into account in Adult Education.
On one hand it's not clear how adults accept it (maybe they evaluate the tool as childish). On the other hand, students with an age of 17 and 18 years old mentioned that they do not think that the Mandala is more fitting to younger learners, and they stated, that this depiction is a worth-full tool for learning. Therefore, the consortium thinks that the Mandala can play the same role in self-evaluation as in the pilot courses.

Self-Evaluation Mandala

Self-evaluation Mandala as used for students

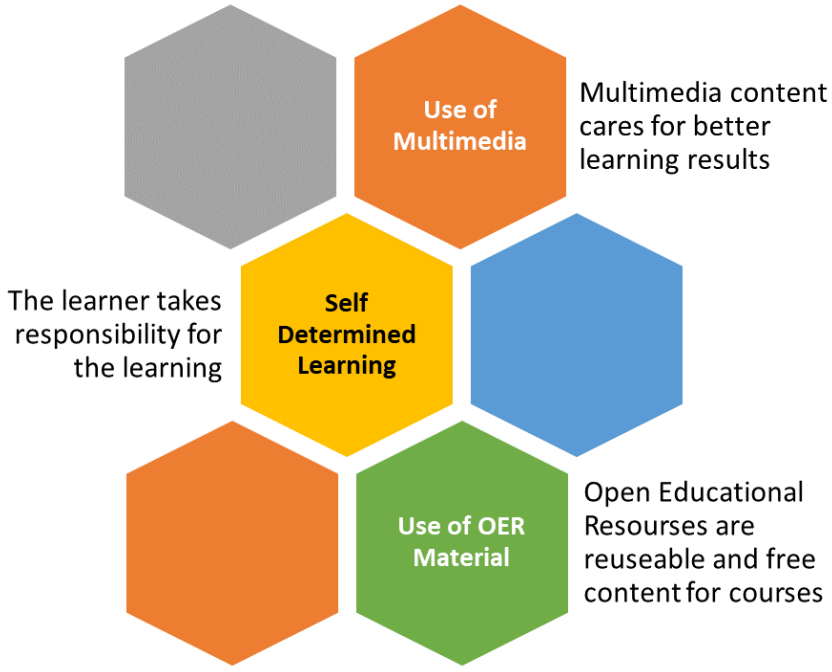


Possible modification of the Self-evaluation Mandala for adults

The process in context with the use of this tool is closely connected with digital competences (download content, edit an image, save it and upload it to the learning platform). So it is necessary to care for the pre-information of these skills to ensure that all adults can care for the digital knowledge and skills to handle the Mandala.
Recommendation: Very well-done descriptions of pre-knowledge should always taken in account for course design and implementation.

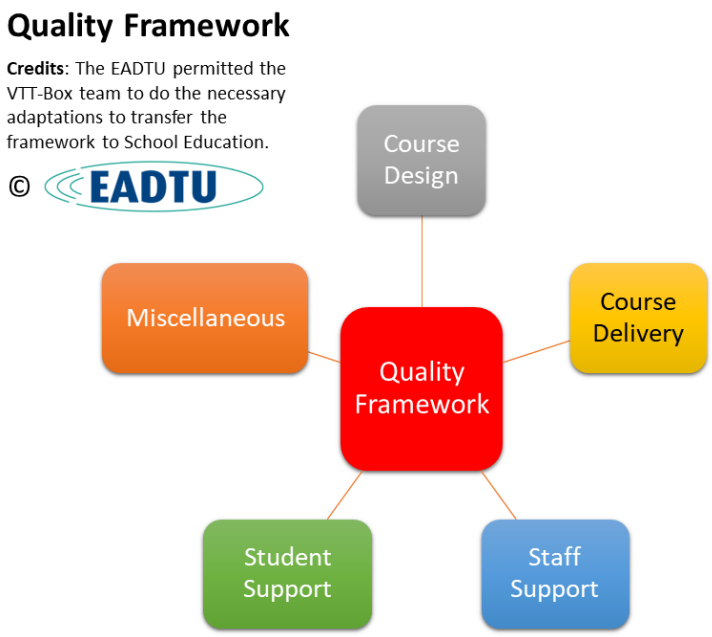
# Course concepts

The VTT-Box course concept focuses on several items. All of them are valid for Adult Education and can be taken more or less 1:1
The development of the course as well as the course creation and implementation can be taken as described in the project for the field of school education.




# Quality Framework

The quality framework can be taken 1:1
The framework is based on the benchmarking developed by the European Association of Distance Teaching Universities EADTU. It has been developed for universities and their specific teaching environment and therefore got some enhancements and changes to fit to School Educations. Adult Education organization show a lot of similarities to School Education, so the framework is more or less valid for this educational field as well.




Here you can follow an [interactive presentation]

# Pedagogical Framework

The pedagogical framework can be taken more or less without major changes.
The following description gives an overview in minor changes that could be useful for the training.

**Distance Learning** will be the same as in School education. The learners must be able to use the learning platform. In school education learning

platforms are often common and the students know to use them.

**Self-Determined Learning** as a cornerstone of the VTT system must be part of the mindset of the learners. Adults often behave a little bit passively in their learning because they were accustomed to this in their own school time.

**Multimedia**, the use of multimedia content and Interactivity is will support the adults in their learning in the same way as it is visible with students in school education. Trainers in Adult Education report sometimes of a bigger effort in the learners' support. The reason could be missing digital competences of the adult learners.

**Collaborative Learning** in School Education is an easy-to-realize issue. In many Adult Education courses, the trainees do not know each other and meet for the first time in the first course lesson. To practice efficient collaborative learning the trainees must get known to each other. Here specific activities can be implemented ("ice breaking activities").

# 5. VET & C-VET Education

In VET and C-VET education exist similarities and big differences.

**Similarities**

- Learners often have a motivation to attend the course out from their vocational business
- Learners are motivated to attend the course because they are interested in the topic,  in personal development or want to reach a higher level in their profession

**Differences**

- VET learners are adults and have more experience in learning
- Due to their age they often act with more maturity

The Self-Evaluation Mandala  may be used as a depiction but the model was developed for younger people like teenagers. So, the need to define the competences in the frame of course creating is valid. The existing competences of the trainees - if necessary - can be asked in a different way. To ask before and after the course is seen as agood strategy.

# Use of the Mandala

Basically, the Mandala could be used in VET as well. Nevertheless, the question about the acceptance of such a depiction used for self-evaluation cannot be answered seriously. The consortium recommends further studies to clear this question.

# Course concepts

The course concepts are valid for VET and C-VET Education more or less 1:1.
The development of the course as well as the course creation and implementation can be taken as described.

Due to the higher maturity of adult learners (compared with pupils or students) the courses can be implemented in a time sparing way and efficient processes. VET learners are often highly motivated to finish the course positively due to the need of the course certificate.

Cooperative assignments must be seen from two points of view:

A. Students/pupils know each other so it's easy for them to cooperate. In vocational education participants of the course must get to know each other - this can be done by ice-breaking activities, special (creative) presentation rounds and other interactive tools.
B. In trainings, which are done in a single company, the trainees often know each other - in this case cooperative assignments are easier to implement.

Another issue is the different levels of knowledge and digital competences as well as the use of a learning platform. The level of digital competences must be cleared before the course starts and this is a reason to provide a high level of support to the learners.

# Quality Framework

The quality framework can be taken 1:1
As the framework has been developed for Distance Learning at universities, the specific term must be replaced.
So students may be called trainees or learners and teachers and professors will be addressed as trainers.

# Pedagogical Framework

The pedagogical framework in school education is equivalent to a training framework in VET. The framework is based on self-directed learning, active learning, the use of e-tivities and the integration of the (competence-based) self-evaluation Mandala. Multimedia and interactivity are also of primary importance, especially in the case of distance or blended learning courses, in which live experience, collaboration and interactions are restricted.
The transfer to the training framework will be listed in a table.

| | |
|---|---|
| **Pedagogy** | In VET education pedagogy is called the training approach. This approach can use the same corner stones as in School Education (Self-directed learning, active training, online socialization, information exchange, collaborative learning and so on). |
| **Course information** | The course information, including a training to the learning plattform (if necessary) is the same as in school education. |
| | |

| | |
|---|---|
| **Assessments** | In School Education the type of assignment is predetermined by the school authorities. In VET education a system of formative and summative assessment - best-fitting to the type of training, should be foreseen. |
| **e-tivities** | E-tivities should be used in the same way as in School Education. Course designers may consider using e-tivities as specific elements of microlearning. |

# 6. Higher Education

In Higher Education online courses can be used:

A. To support courses, seminars, workshops and other learning activities that tutors carry out into the classroom; in this case online courses support and complement home study and coursework and respond to learners special requirements for differentiation in learning styles, pace of study etc.;
B. As the backbone and the primary learning environment of distance and blended learning courses that do not require the learner's physical presence in the lecture rooms.

# Use of the Mandala

The self-evaluation Mandala can be used in Higher Education as well. Students can track their progress and tutors can monitor learner's development and pace of progress. Students in Higher Education are frequently asked to reflect on their learning progress and define what they need in order to develop in-depth knowledge and professional competences further. Self-evaluation is critical in this direction. Students and tutors who were presented with the Mandala tool were eager to try it out and gave positive feedback on its use.

6.2 Course concepts
The VTT-Box course concept focuses on several items. All of them are valid for Higher Education and can be taken more or less 1:1. The development of the course as well as the course creation and implementation can be taken as described in the project for the field of school education.

# Quality Framework

The quality framework for the VTT-project has been taken (with the agreement of the EADTU) from the e-xcellence framework developed from the start for Distance Learning on Higher Education level, but is now in addition used even fo for quality in  open online, distance and blended learning. Thus it is already designed to serve the needs of Higher Education and as such, it can be used with minor amendments so that it complies with the profile of each Institution.
The e-Xcellence framework focuses on the 6 different fields which alle are still valid for teaching in Higher Education.

1. Strategic Management
2. Curriculum Design
3. Course Design
4. Course Delivery
5. Staff Support
6. Student Support

It requires some decisions (such as the layout and presentation, the use of third party materials, technical support or the implementation of a consistent assessment strategy, etc.) need to be made at an institution level which demands coherent management and collaborative work that represents all the different stakeholders.

# Pedagogical Framework

The Pedagogical Framework is 1:1 compatible with the developed framework. The framework (in original version) can be downloaded from the webpage of the project.
Link: https://www.vtt-box.eu/project/download/197/
The framework is based on self-directed learning, active learning, the use of e-tivities and the integration of the (competence-based) Self-evaluation Mandala. Multimedia and interactivity are also of primary importance, especially in the case of distance or blended learning courses where live experience, collaboration and interactions are restricted. Multimedia should deliver state-of -the-art content that is pedagogically effective, efficient and

appealing. It is also functional, user friendly and displays technological efficiency (e.g. it works, it does not frustrate users, etc.).

# 7. Evaluation guide

Courses should be assessed with a solid **quality framework**. The quality framework E-xcellence by the **European Association of Distance Education** (EADTU) is such a framework and internationally recognized. E-xcellence was originally developed for distance learning, but today it is also used for courses in open, online, flexible and mixed mode.

# Evaluation of courses in other subjects

As a rule, the evaluation of a course follows the framework of the course design. The following points shall be taken into account for the evaluation (related to E-xcellence):

## Content

1. The necessary conditions shall be stated clearly and unambiguously.
2. In the case of a specific course start and end, this must be clearly indicated.
3. Resources should be clearly indicated.
4. In case of special needs (which should be free of charge, no additional costs), e.g. for disabled people, this should be clearly indicated how to get support.
5. If there are no possibilities to meet the requirements, this should be indicated, how to proceed and how to appeal against the requirements.
6. The content should correspond to the objectives of the curriculum or any other type of course outline.
7. The content should be relevant and up to date and reflect the state of the art and research in the field.
8. Clear learning outcomes (LO) should be provided for reasons of transparency.
9. The information on the forms of evaluations should be explicit.
10. The form of certificates, degrees and/or open badges should be clearly indicated.

## Structure and format

The course is well structured in terms of content and format. The course structure is transparent.
The course structure is uniform and transparent.

## Course information

Course information must cover all aspects of the course and be clear, constructive and transparent.

## Quality framework

The quality framework used should also reflect the evaluation. In addition to the three areas Management, Products (Curriculum Design, Curriculum Design, Course Design, Course Delivery) and Support (Personnel and Student Support), the following four dimensions are furthermore decisive for EADTU E-xcellence

1. *Accessessibility*
   The course should be accessible in all respects, in time, space, path, mode, etc.
2. *Transparency*
   The course outline should be transparent so that the learner can take her/his own responsibility for her/his own learning.

3. *Personal learning/personalization*
   The course should not only be personalized within the given framework, but also individually tailored to individual needs, requirements and learning styles. It should also reflect diversity in every respect.
4. *Flexibility*
   Flexibility should be in all means, time, space, path, mode, media, resources and devices. The diversity of learning methods, resources and assessments should be taken into account.

**Pedagogical framework**

The pedagogical framework used should also reflect the assessment. According to the pedagogical framework, the evaluation of online courses should verify that the following conditions are met:

The step-by-step familiarization of the learner with the learning environment is systematic and explicit. Activities should be defined in such a way that learners use all available resources and activities and are supported accordingly.

A first group of activities enables learners to get to know each other.

Three different types of activities are included: Activities aiming at the development of core competencies, those involving learners in collaborative tasks and those requiring independent learning and working.

**Assessments**

Assessments can consist of a variety of features, such as assessment *of* learning, assessment *for* learning and assessment *as* learning.

In addition, the assessment can be both formative and summative.

# Evaluation of new VTT-Box Courses

The EADTU E-excellence was used for the VTT-Box for the pedagogical and qualitative framework. The use of the E-Excellence excellence label of quality in this context is subject to the approval of the European EADTU Association of Distance Teaching Universities. If the benchmarks are adjusted, the context can be found in the comments below the original benchmark. The original framework is available at https://e-xcellence.eadtu.eu/

In addition, as mentioned above, there are specific innovative elements and considerations for VTT courses that have been developed and tested during the project. These innovative considerations should therefore be evaluated specifically for VTT courses. The elements are added as follows:

## Creation and use of the Mandala self-evaluation

The self-evaluation Mandala was prepared, developed and tested throughout the VTT project. This is an innovative and new approach used in the courses. A Self-Evaluation Mandala,  which represents the competence taught in the course - must be available and used correctly. This means that the Mandala is prepared for two uses:

1. Learners receive the Mandala before the course begins.
2. Learners fill in the Mandala a second time after the course.

It is possible to distinguish between these two Mandalas.

## Competence based descriptions and instructions

This is aimed at using the Mandala self-evaluation approach to achieve personal learning, which has also been emphasized throughout the VTT project. Competences should be clearly defined and formulated as desirable behaviors and skills.

## Use of multimedia and interactivity

The use of multimedia, multiple devices such as PCs, laptops, tablets, mobile phones, etc., and all areas of interactivity were highlighted throughout the VTT project. In addition, it is emphasized both in the pedagogical framework and in the quality framework and in the bringing together of the two.

## The use of Open Educational Resources (OER)

The use of OER open and free content that can be shared was highlighted throughout the VTT project. In addition, the toolbox for VTT also only includes OER and open and free materials and resources. The license used for the project is CC BY SA NC Creative Commons Attribution Non-commercial Share Alike License 4.0 .

Table 1. An overview of self-evaluation of new VTT- courses. Please relate to the statements mentioned above.

| **Evaluation of new VTT-courses** | **Very weak fulfillment** | **Weak fulfillment** | **Strong fulfillment** | **Very strong fulfillment** | **No answer** | **Comments** |
|---|---|---|---|---|---|---|
| **Content**<br>The content fits to the curriculum and is at the current level of knowledge. Time and resources are clearly expressed. | | | | | | |
| **Course information**<br>Course information must cover all aspects of the course and be clear, constructive and transparent. | | | | | | |
| **Structure and format of the course are well designed.**<br>The course is well structured in terms of content and format. The course structure is transparent.<br>The course structure is uniform and transparent | | | | | | |
| | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Quality framework**<br>The three areas Management, Products, and Support.<br>The four dimensions<br>• Accessessibility<br>• Transparency<br>• Personal learning/personalization and<br>• Flexibility<br>are clearly considered. | | | | | | |
| **Pedagogical framework**<br>The pedagogical framework reflects the assessment.<br>The step-by-step familiarization of the learner with the learning environment is systematic and explicit.<br>A first group of activities enables learners to get to know each other.<br>The three different types of activities are included. | | | | | | |
| **Assessments**<br>The nature of the assessments should be clear, such as assessment *of* learning, assessment *for* learning and assessment *as* learning.<br>The nature of the assessments should be clear formative and summative. | | | | | | |
| **Creation and use of the Mandala self-evaluation**<br>Learners receive the Mandala both before the course begins and a second time after the course. | | | | | | |
| **Competence based instructions**<br>The Mandala self-evaluation | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| approach is applied to achieve personal learning | | | | | | |
| **Use of multimedia and interactivity**<br>The use of multimedia, multiple devices such as PCs, laptops, tablets, mobile phones, etc., and all areas of interactivity were highlighted throughout | | | | | | |
| **The use of OER and CC licences should be clear, preferable:** The license used for the project is CC BY SA NC 4.0 . | | | | | | |

# 8. Toolbox

The toolbox can be used for all kinds of courses that focus on distance learning. Nevertheless, the descriptions take care to promote the VTT-system, which is developed in the project.

# Elements of the Toolbox

The toolbox consists of several stand-alone tools. These are

1. **Course Structure**
   This part of the toolbox assists in the creation of the course structure.
2. **List of Activities**
   This tool creates a specific list of activities you can use in your course. These activities provide interactivity and multimedia based activities in your course. It is an interactive tool which enables the user to select the field of teaching/training and to get a list of proposals for activities for the use in a Moodle course.
3. **List of Quality Criteria**
   This tool creates several specific description of quality criteria which can be used to create high quality courses.
4. **Checklist for Course Creation**
   This tool produces three different checklists for the course creators. These lists can be used to control and to check the created courses taking into account the pedagogical framework, the course execution, or the assessment and evaluation of the courses.
5. **Course Evaluation**
   This tool creates advice and help to evaluate a created course taking into account the developed pedagogical framework and the used quality framework.
6. **Competence Definition**
   The toolbox is based on competency based learning (and teaching) as it is common in the European Community (EC). Competences are defining “something that the learner should be able to do” finally.

These competences consist  of knowledge, skills and attitudes.
The tool assists in the creation of the competence which is the central learning aim of the course. This competence is also needed to create the Self-evaluation Mandala(s).

7. **The Self-Evaluation Mandala**
   To express the competencies a depiction based on a half circle was developed and labelled with the three competence items: knowledge, skills, and attitudes. The heading defines the description of the competence.
8. **Mandala Creation**

An innovation (used for the first time in a concept for developing Open Online Distance Learning Courses) is the mandala self-evaluation. This tool enables to create a mandala used in the course easily.

1. **Self-Evaluation Mandala Creation Kit**
   This is aword-based tool to create the self-evaluation mandala for your course.
2. **Various Checklists for Courses**
   This tool creates several checklists for the courses to assist the teacher / course creator.

# Transfer to other educational fields

The following table gives an overview of the possible transfer to other educational fields. The symbols can be interpreted as follows:

☑ complete transfer possible
✓ partly transfer possible
✕ transfer not possible (or is not yet predictable or researched)

| **Toolbox Element** | **Adult Education** | **Vocational Education and Training** | **Higher Education** |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Course Structure | ☑ | ☑ | ☑ |
| List of Activities | ☑ | ☑ | ☑ |
| List of Quality Criteria | ☑ | ☑ | ☑ |
| Checklist for Course Creation | ☑ | ☑ | ☑ |
| Course Evaluation | ☑ | ☑ | ☑ |
| Competence Definition | ☑ | ☑ | ☑ |
| The Self-Evaluation Mandala (1) | ☑ | ✓ | ✓ |
| Mandala Creation | ☑ | ✓ | ✓ |
| Self-Evaluation Mandala Creation Kit | ☑ | ✓ | ✓ |
| Various Checklists for Courses | ☑ | ☑ | ☑ |

(1) With November 2019 a new Erasmus+ Adult Education KA 402 project (named DISK) starts with the Mandala as a Self-Evaluation tool in the frame of courses to increase digital competences of adults.

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