

# DCDS Training Organisation Handbook (TOH)

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#### **Introduction**

The Training Organization Handbook aims to provide guidance to organisations that want to use the DCDS system after the end of the DCDS project to pursue the same general objectives.

The guidelines, being addressed to organisations responsible for user training, are related to two coordinated but distinct areas:

- a. Activities for users: self-assessment, indication of training needs, choice of learning pathways to satisfy them, training of users, validation of skills and competences acquired by users.
- b. The technical, organizational and professional resources to be made available to conduct, guide and control the activities for users.

All user activities have generated specific documents and manuals during the DCDS project, some of them reviewed after the training pilots carried out in five partner countries. These are specific and systematic documents, which represent the accessible knowledge base for any problems that may arise from conducting activities. Therefore, this handbook will dedicate to the activities of self-assessment, training and validation only very synthetic references, referring for a more systematic treatment to the documents already available (see <a href="http://www.dcds-project.eu/resources/">http://www.dcds-project.eu/resources/</a>). The focus here will be rather on the viewpoint and problems of the organizations: the options that training organizations can choose about using the DCDS system; the organizational commitment that comes from choosing a certain perspective of use or another; the technical and professional resources that must be employed, the skills (in particular of teachers and tutors) that are required.

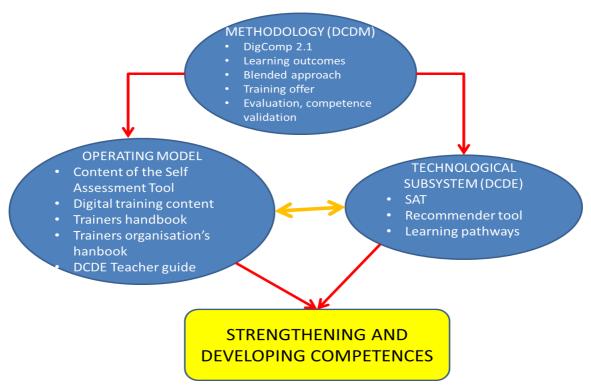


#### 1. Presentation of DCDS

#### 1.1 The system at a glance

The **Digital Competences Development System (DCDS)** is an integrated system for training organizations that act to enhance the basic digital skills of adults with skills shortages, both digital and general.

Figure 1 – Representation of the system



DCDS is based on three subsystems, namely the Methodology (DCDM Digital competence development methodology), the Operating model and the Technological subsystem (DCDE Digital competence development environment). The integrated action of the three subsystems feeds the actual process of work, i.e. strengthening and developing competences.

The **Methodology (DCDM)** is inspired by the areas of competence and specific competences contained in the European digital competence framework for all citizens DigComp 2.1. The DigComp competences taken as reference are articulated in specific indicative performances that describe the final learning outcomes (LOUT) of the courses.

The central methodological assumption is that the training courses are blended (delivered partly face-to-face and partly at a distance) and organized in general learning pathways (LPs) divided into specific modules. The evaluation system recognizes three levels of validation: module level, LP level, level of specific DigComp competence acquired.

The setting of the Technological subsystem and the Operating model depends on the methodology.



The **Technological subsystem (DCDE)** implements the methodology through the following modules:

- self-assessment tool (SAT) for basic digital competences. The SAT is a tool that allows
  users to self-assess and test their digital competences, establishing which training is useful
  for them.
- Recommender Tool which enables tutors and trainees to identify which learning pathways best match the trainees' needs.

The **Operating model** contains the guidelines for the process of **developing digital competence**. This process includes the following steps which involve face-to-face and online activities (exploiting the DCDE platform) for the full implementation of the DCDM methodology:

- 1) Inviting the target groups to participate to digital competence development interventions related to the improvement of their employability, social inclusion, etc.
- 2) Initial learner interview and profiling.
- 3) Self-assessment of digital competence using the SAT of the DCDE.
- 4) Choice of the training offer, possibly according to the advice of the **Recommender Tool** and with the agreement of the teacher-tutor and the learner.
- 5) Face-to-face training delivery in the classroom. Gradually, learners should engage with the DCDE. This can be realized with the support of the teacher-tutor, including with the of the reading and visual materials, learning quizzes and practical exercises available in the learning units on the DCDE. The Teacher Tips report and the repository of Auxiliary materials offer teachers additional didactic suggestions about learning materials and activities related to each learning module and its learning units.
- 6) Learning evaluation at the end of each module with **summative tests** on the DCDE, taken in the classroom under teacher supervision.
- 7) Issuing the badge for the results obtained (Module badge, Learning Path badge, Competence badge).
- 8) Completing the DCDS training with the assignment of the DCDS course certificate.

#### 1.2 Users

The DCDS addresses 25+ years old adults with a low level of digital skills. These low digitally skilled adults can be in employment, unemployed or economically inactive, but share a need to strengthen their basic digital and transversal skills or to acquire new ones in different digital domains.

With reference to **low-skilled adults**, DCDS focuses on closing their basic digital skills gap, thus improving the whole spectrum of personal and professional conditions and, in particular:



- Stimulating a more active participation in society.
- Increasing self-esteem.
- Reducing unemployment rate.
- Facilitating up-skilling for career advance and higher wages.
- Positively impacting on health.

#### 1.3 Why choose DCDS and its benefits

The DCDS will empower citizens, training providers and policy makers to address the lack of basic digital skills, by supporting assessment of adult citizens' learning needs, valorisation of their existing skills, and design and delivery of inviting training opportunities adapted to individual learning needs. The benefits of the DCDS are listed below.

The training offer is based on competence needs disclosed by users through **self-assessment questions (SA-Q)** and **knowledge and ability questions (KA-Q)** in the DCDS SAT.

The training offer is flexible and allows users to choose the learning path and/or compositions of modules that fit their needs and desires.

The blended approach allows to balance case by case the use of the classroom and that of online resources, promoting a more effective **individualization** of the learning process.

The system can be exploited by training organizations in a **flexible way**, that is:

- a) Applying the whole methodological model in favour of their customers and using the system's resources in different ways and according to different degrees of freedom.
- b) Using independently knowledge, products and ideas drawn from the system. In particular:
  - i. Take-up integrated DCDS and adapt to national context
  - ii. Adopt methodology, reuse content items (e.g. assessment quizzes)
  - iii. Add new content (embedded, auxiliary)
  - iv. Extend to higher DigComp competence levels
  - v. Add / re-compose new learning paths (e.g. browsing and email, safety and security)
  - vi. Use tools independently (e.g. SAT)
  - vii. Add new tools (e.g. games)
  - viii. Give policy recommendations (e.g. to stakeholders / policy makers)



### 2. Description of DCDS

#### 2.1 Methodological assumptions

The DCDS methodology is based on three main assumptions:

- 1. DCDS refers to competences as defined in the European framework DigComp 2.1.
- 2. In order to generate authentic educational goals, DigComp competences must be articulated in specific learning outcomes.
- 3. The training paths adopt a blended learning approach.

#### FIRST ASSUMPTION - DIGCOMP

DCDS is a system for competence assessment, learning offer and validation and recognition, to develop the **basic digital competence** of low digitally-skilled 25+ years old adults in Europe. Basic digital competence is identified in DCDS as that defined at proficiency **level 1 and 2**, **or foundation level**, of the European Digital competence framework for all citizens known as **DigComp** v.2.1.

DigComp identifies 5 competence areas and 21 specific competences which outline the key components of the digital competence, as illustrated in Table 2 below.

Table 2 – DigComp 2.1 areas and specific competences

Area 1 – Information and data literacy
1.1 Browsing, searching and filtering data, information and digital content
1.2 Evaluating data, information and digital content
1.3 Managing data, information and digital content
Area 2 – Communication and collaboration
2.1 Interacting through digital technologies
2.2 Sharing through digital technologies
2.3 Engaging in citizenship through digital technologies
2.4 Collaborating through digital technologies
2.5 Netiquette
2.6 Managing digital identity
Area 3 – Digital content creation
3.1 Developing digital content
3.2 Integrating and re-elaborating digital content
3.3 Copyright and licenses
3.4 Programming



Area 4 – Safety
4.1 Protecting devices
4.2 Protecting personal data and privacy
4.3 Protecting health and well-being
4.4 Protecting the environment
Area 5 – Problem solving
5.1 Solving technical problems
5.2 Identifying needs and technological responses
5.3 Creatively using digital technologies
5.4 Identifying digital competence gaps

#### SECOND ASSUMPTION - LEARNING OUTCOMES

The **learning outcomes (LOUTs)** that articulate the competences in distinct performances have been defined adopting Robert Mager's view of performance-based learning, as made of three components:<sup>1</sup>

- **performance** is an observable behaviour which identifies specifically what the learner should be able to do after the instruction
- **conditions** under which the learning is to occur
  - criterion that describes how well the learner must perform in order to be acceptable

The focus of Digital Competence Development Methodology (DCDM) is on the performance component, and the final result of this work has been to specify one or more LOUTs for each one of DigComp's 21 competences.

The LOUTs that stem from this activity meet four general criteria:

- a performance that is/concerns what is "basic" and hopefully "simple" in each specific
  domain (a starting unavoidable point, key building block, such as addressing the basic
  functions of an application, device etc. Or in a context of multiple opportunities, aspects,
  dimensions selecting only a few (1-2-3) significant cases of e.g. safety management
  solutions, online services for navigation etc.);
- for which a significant level of **autonomy** can be expected to be reached relatively easily (e.g. through a short training experience like that of the DCDS pilots);
- whose attainment, in isolation or along with other LOUTs, entails an interesting, meaningful learning experience and achievement for the learners;

<sup>&</sup>lt;sup>1</sup> Mager, Robert F. (1997). Preparing instructional objectives, a critical tool in the development of effective instruction (3rd ed.). Atlanta, Ga.: Center for Effective Performance. ISBN 1879618036



• with positive **social inclusion** implications (whenever possible to ascertain them), given the target population and general aims of the DCDS project.

The final result is represented by 95 LOUTs that articulate DigComp competences.

Table 2 - Number of DCDS LOUTs by DigComp competences and areas

DigComp competence	LOUTs n°
1.1 Browsing, searching and filtering	8
1.2 Evaluating info and content	3
1.3 Managing info and content	6
sub-total Area 1	17
2.1 Interacting	9
2.2 Sharing	4
2.3 Engaging in citizenship	8
2.4 Collaborating	3
2.5 Netiquette	5
2.6 Managing digital identity	4
sub-total Area 2	33
3.1 Developing content	6
3.2 Integrating and re-elaborating	4
3.3 Copyright and licenses	3
3.4 Programming	2
sub-total Area 3	15
4.1 Protecting devices	7
4.2 Protecting personal data and privacy	6
4.3 Protecting health and well-being	4
4.4 Protecting the environment	2
sub-total Area 4	19
5.1 Solving technical problems	4
5.2 Identifying needs and responses	3
5.3 Creatively using	2
5.4 Identifying digital competence gaps	2
sub-total Area 5	11
Total LOUTs	95



#### THIRD ASSUMPTION - BLENDED LEARNING

The potential users of DCDS are people with low levels of digital skills and often also of education. With these users, it is advisable to take an approach that gradually exposes them to the use of digital tools and services, as their autonomy in carrying out digital activities progresses. For this reason, the project has opted for a **blended** path, in which training activities in presence and at a distance alternate, maintaining a strong integration between them.

# 2.2 The self-assessment tool (SAT) and the Recommender Tool

The self-assessment tool is intended to help trainees determine which digital competences they have important gaps in (or lack at all) and to choose the most suitable training path.

All the candidates who can access the DCDE platform and use it on their own, or with the help and guidance of a relative, friend or e-facilitator, can take the test, which is structured according to the DigComp 5 areas and 21 competences (SAT modules).

In each SAT module, candidates must first answer to the **self-assessment questions** (**SA-Qs**) which address all the learning outcomes (LOUTs) identified for that competence. Their number varies for each competence and in total there are 95 SA-Qs.

SA-Qs have a standard format. The introduction is always formulated as, "We ask you to evaluate how do you ... navigate, collaborate ... (*reference to the general competence theme*). We now list some activities below and you have to grade them using the following scale:

1 = I have no skills at all; 2 = my skills are very poor; 3 = I have some skills, but not sufficient to operate on my own; 4 = I have sufficient skills to operate on my own"

An answer is then provided for each of the competence's LOUTs as follows: "My ability to ... *text drawn from the LOUT* ... is:..." where the respondent must select the number from the above scale.

After answering to all the SA-Qs of a module, the SAT presents one to four **knowledge & ability questions** (**KA-Qs**) always related to the given competence. There are in total 41 KA-Qs in the SAT.

KA-Qs are designed to test the actual conceptual or operational knowledge of the respondent on a sub-set of key LOUTs of the given competence. If the answer to any KA-Q is wrong, the respondent gets a feedback message encouraging him/her to take some training on that competence. If the answers to all KA-Qs of the module are correct, the respondent is informed about this result and told to continue with the SAT.

At the end of the self-assessment, the tutor-teacher can consult the **Recommender Tool** to give advice to the candidate on the learning path that he/she should attend to fill the gaps in competence. This step is only possible if the candidate answers all the questions of the SAT.



#### 2.3 Training offer structure and approach

#### ARTICULATION OF THE TRAINING OFFER

The DCDS training offer, at the basic level, is made of Learning Units, which are assembled into Modules, which in turn make up a Learning Path. Figure 1 illustrates this training offer architecture, taking as an example (in the upper part) the main Learning Path and its first module.

LOUT 3.1.1 Learning Unit 3.1.A LOUT **Module Managing files** 1.3.1 -> **Learning Unit** and folders 1.3.5 1.3A Learning Unit 1.3B LEARNING PATH Module Safe browsing.. 1.3.6 **BASE** Learning Unit 2.2B Modules ... LOUT Modules .... 2.2.2 Module Digital selfawareness and learning Learning Unit .. Module ... **LEARNING PATH ...** Module ...

Figure 1 - Structure of DCDS training offer

**Learning outcomes (LOUTs)**: DCDS LOUTs are the performance counterpart of DigComp competences at foundation level: each competence is identified with the performances expressed by 1 or more LOUTs derived from it. Therefore, the LOUTs guarantee the connection between DigComp 2.0 competences and the didactic activities intended to produce those competences: they are the didactic objectives of these activities. There are 95 LOUTS in DCDS listed in DCDS Trainer Handbook - Annex 1.

**Learning units (LUs)** are the set of didactic activities sufficient to generate the performance of one or several LOUTs connected and belonging to a given competence. One or more LOUTs are the didactic objectives of their LU. The structure of a LU is illustrated later in this chapter. There are 64 LUs in DCDS, listed and ordered by their code in DCDS Trainer Handbook - Annex 2.

**Modules**: LUs in DCDS are organised for didactic purposes into 18 thematic modules, which make up 4 sequences called Learning paths. The sequencing of LUs inside each module, is illustrated in



in DCDS Trainer Handbook - Annex 3. In principle, there should not be a problem if training organisations and their teachers wanted to deliver the LUs of any Module in a different sequence. The important thing is that all the LUs of any given Module are addressed, as summative assessment is performed at Module level.

**Learning paths** (LPs): a LP is a complete training offer whose purpose is to develop sufficient skills to manage a digital environment or scenario.

Table 3 lists the DCDS 4 Learning Paths and 19 Modules (module Copyright and licenses is repeated twice). The estimated duration of each Module and Learning Path is also provided.

Table 3 - DCDS 4 Learning paths and 19 modules (indented)

	Estimated delivery time (h)
LP BASE (38 LUs) At the end of this LP, participants will be able, at a basic level, to safely surf the Internet, receive and send emails, manage data and digital content, find and make a simple, use of online public and private services. This LP addresses basic skills which are crucial to begin taking advantage of the digital world and for digital inclusion.	39
Managing files and folders	4
Safe browsing and aware info search	9.5
Creating an account and using e-mail safely and correctly	6
Learning about public and private online service	5
Protecting devices, data, health and well-being	6.5
Basic ICT operations	7
Digital self-awareness and learning	1
LP COMMUNICATION & SOCIAL MEDIA (17 LUs) This LP addresses a leisure/social life scenario, where participants can develop skills for online digital communication, collaboration and sharing, and the use of social networks.	14
Communication services	4.25
Social media	7.25
Copyright and licences	2



	1
LP DIGITAL CONTENT CREATION (8 LUs) In this LP participants can develop digital skills for the creation of digital content (text documents, spreadsheets and presentations) which are particularly relevant in an employability scenario	16
Documents	2.5
Spreadsheets	6
Presentations	5
Photos and videos	0.5
Copyright and licences	2
LP EXPLORE ICT (4 LUs)	
This LP addresses different topics which can be viewed as the first steps of an exploration scenario of the ICT world	7
Programming	2.5
Environment	1
Technical problems	1.5
ICT tools	2

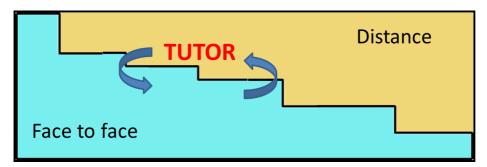
Based on the DCDS training pilots' experiences, the time initially envisaged as being necessary for course delivery (see Table 3) was significantly underestimated, even though, of course, much depended on learner groups' characteristics. With 'weak' learners (people with no previous digital experience and/or low educational background and ability for autonomous study and/or limited proficiency in the course language), the actual training time might be easily increased about 50%.

#### **BLENDED APPROACH**

Given that the potential users of DCDS are people with low levels of digital skills and often also of education, DCDS has adopted a blended learning path with a gradual approach (see Figure 33), initially the activities in presence prevail over activities at a distance and distance activities grow over time, as the learner autonomy in using digital tools progresses. Regardless of their balance, activities in presence and at a distance must always maintain a strong integration between them.



Figure 3 - Face-to-face vs. distant learning activities during the course



Blended learning paths are such, because presence and distant activities not only alternate in time, but also because these activities are integrated. For example, during a lesson in presence some exercises are presented to be done at a distance and their solutions are then discussed in presence again.

The order and alternation of the blended learning activities has to be defined in the training programme agreed with the participants.

#### Tutoring and teaching

Tutoring and teaching are contiguous and complementary functions.

For **tutors**, the most challenging goal in a blended learning path is the integration of activities performed in presence and at a distance, in order to obtain the desired results. Tutoring should be done at three levels:

- individual participants
- groups of participants
- the learning path

Working with **individual participants** should build upon the knowledge and relationship developed with them in the initial facilitation stage. The tutor supports the participant by facilitating the use of online resources and classroom activities; helps him/her to reflect on the experiences made; helps him/her to connect the new contents learned with his/her previous experience (this scaffolding action is crucial with adult learners); facilitates the participant's relations with the peer group; and finally, the tutor is the natural interface with the organisation that provides the training.

When working with **groups**, tutoring should accelerate the transformation of the group's participants into a learning community. In a social learning perspective, tutoring promotes collaboration among the participants and facilitates the development of peer consulting and peer review relationships among them. The tutor also controls and encourages participation in distance activities involving peer sharing and collaboration.

In the delivery of the **training course**, the tutor collaborates in the didactic planning; gives his/her opinion on contents and verification tests; guarantees the usability of the resources dedicated to distance learning, and manages the transition from presence to distance.



**Teaching** is the didactic-specialist function of delivering technical disciplinary content. In a blended learning context, teaching entails delivering lessons in presence and at a distance, but also preparing or overviewing the production of distance learning materials such as learning objects (LOs), conditional Moodle lessons, readings, exercises. Teachers also overview and adapt when needed the assessment tests, promote and monitor their delivery and assess their outcomes.

In short, Tutoring oversees the whole didactic process; Teaching is devoted to content delivery and assessment.

# 2.4 Technological infrastructure (why DCDE and how it can help)

The main technological resource in DCDS is the DCDE Moodle platform that allows to manage all the distant activities – at individual and group level, synchronous and asynchronous - of the blended course.

Participants access the platform with rights that allow them, as they acquire the ability, to participate in educational activities, write on the forums, in chat and on the wiki, upload files in their personal folder and attach them in the activities that provide for or allow it. The platform has to be used as much as possible as a "gym", with exercises for learning digital skills in the classroom and not only at a distance. Obviously, participants must gradually be involved in online activities beyond the platform itself.

Facilitators, tutors and teachers access with the rights that allow them to set up the course, add and edit activities and resources, register participants, compose and manage work groups, prepare and manage assessment tests and register.



# 3. Organizational requirements for using DCDS

#### 3.1 Organizational involvement using DCDS

DCDS is both a methodological model and a resource system. It can be used by organizations in two different ways.

- 1. Applying the methodological model in favour of its users and using the system's resources in different ways and according to different degrees of freedom.
- 2. Using knowledge, products and ideas drawn from the DCDS (for example: Pane e Internet in Emilia Romagna is using DCDS Learning Outcomes as a reference for the educational objectives of its training projects).

DCDS is open to revisions and interpretations related to the local features of the organization using it, but there are some elements that cannot be removed, in particular:

- Learning Outcomes: the whole system of DCDS learning objectives and assessment criteria is based on them. They can be replaced with similar ones, but not simply removed.
- Summative Test System: it constitutes the scaffold of the system for learning evaluation and issuing badges to certify the acquired competence.
- Blended approach: presence and distance components are complementary and necessary for training. It also facilitates the initiation of personalisation and individualisation practices.
- Use of the DCDE platform: even in situations where distance learning has been minimal, the platform has been a fundamental complement to support presence learning.

The organization's involvement in the use of DCDS and DCDE is proportional to the level of autonomy with which it uses the platform.

There are at least three levels of autonomy.

Minimum level of autonomy: Following the DCDS methodology

The organization uses DCDE in its standard version, with predefined contents that can only be modified by the administrator. The facilitator, tutor and teacher do not need any special skills in using Moodle.



The teachers are likely to have difficulty introducing students to the use of the platform and assisting them during the activity.

Intermediate level of autonomy: Differentiate with DCDS

The differentiation includes – but it is not limited to – new courses, new tools, new functionalities, groups with different characteristics.

The organization intervenes on the didactic contents and on the didactic administration of the courses, participants and groups. The teachers are able to modify the content and the courses, adapting them to the needs of their users and their organization.

Teachers are able to introduce and assist users in using Moodle. It is possible to introduce personalization and individualization in a non-trivial way.

**Maximum level** of autonomy: Fully run by project partners or generally by TOs in their language.

The organization has its own Moodle platform in which it administers a local copy of DCDE. It is completely autonomous in the management of Learning Pathways and content. It is possible to export the model to different contexts for other targets. Possibilities for personalisation and individualisation of learning paths. The organization must have its own administrator for the platform and manage its own server.

Moving from the minimum to the maximum level of autonomy progressively increases the involvement of the training organization: increases the commitment in the management of teaching and technology and this is reflected in the skills required of teachers.

# 3.2 Trainer skills requirements to effectively manage the system

The way of managing the didactic relationship with the users is developed mainly in the methodological documents. The training organization should prepare the material, technical and professional resources necessary or only useful for the success of the teaching activity. The focus must be above all on the teaching staff, who must have skills both in the subject and in the teaching methodology and technology.

The methodological and technological skills requirements of facilitator, tutor and teacher change over the different phases of DCDS activation.

#### First phase - Self assessment and choice of the training offer

The facilitator (or someone playing this role) is present and active in this phase. The facilitator must be able to conduct an interview with the candidate to obtain sufficient information for his/her profiling and to clarify his/her motivation to undertake a digital competence development path. He/she should then help candidates to use the SAT for self-assessment and in the final choice of LPs and/or modules that can meet their skills needs.



The facilitator supports and motivates the candidate, but there is no need for an autonomous role, an experienced tutor is able to perform these initial activities.

#### Second phase - Attending the training

During the training the active roles are the tutor and the teacher. Also in this case, it is not necessary that the roles are acted by different people, often a single trainer is able to manage teaching and tutoring.

The trainer acting as a teacher must know and be able to teach the content of the selected training units and to help students in difficulty by recovering them to the path. The trainer acting as a tutor must be able to support the students, talk with them, act on motivational shortcomings and help the students in using the DCDE platform.

The technological skills that trainers must possess vary according to the level of autonomy with which the training organisation manages the DCDE platform.

At the minimum level, the trainer has little changes to make on the platform, so his/her skills are similar to those of any user/student.

In the intermediate and/or maximum levels, the trainer must have more developed technoeducational skills. In particular, trainers should be able to deal with:

- Course administration: design the course, setup of the course settings, setup of the completion settings, enroll students and group settings, check the logs and the students' activities.
- "Didactic" administration: upload and adapt training contents, add and setup activities, add and setup resources, add and setup a Moodle lesson, manage synchronous and asynchronous communication.

In general, trainers must also have good e-learning design skills, which will be necessary to adapt the technological assets according to a coherent educational plan.

## Third phase - Learning evaluation with DCDE summative tests and issuing the badge for the result obtained

Also in this case, the technological skills that trainers must possess vary according to the level of autonomy with which the training organization manages the DCDE platform.

In particular, trainer should be able to: setup and update gradebook, add and setup quizzes, questionnaires and assignments, setup and manage the questions bank, setup and manage badges.



# 4. Final recommendation: go for it!

#### 4.1 The DCDS pilots

The DCDS project training pilots have been carried out in the first half of 2019 in order to evaluate the adequacy, reliability and quality of the tools developed as well as to provide recommendations for further improvement. The pilots involved training organisations, trainers and trainees in Greece, Italy, Latvia, Romania, Spain.

The following main project outputs have been tested and evaluated:

- 1) **DCDM**, **the Digital Competences Development Methodology**, that supports the development of digital competences and related transversal competences of adults
- 2) **DCDE, the Digital Competences Development Environment,** the Moodle online platform in 6 languages (English, Spanish, Italian, Latvian, Romanian and Greek) that implements DCDM by offering the self-assessment tool, the learning paths and modules, the formative and summative evaluation system, the badge issuing.

To evaluate 1) and 2) the following aspects of DCDS have been tested during the pilot:

- Overall validity of the DCDS methodology:
  - Content and proposed learning outcomes
  - Learning approach
  - Skills validation system
- DCDS online platform, including aspects such as:
  - o Online tools
  - Navigation
  - User interface and administration
- Potential impact for end users:
  - Increase of digital skills confidence level
  - Usefulness of the acquired skills
  - Potential exploitation of the DCDS methodology and online platform for training organizations and trainers

The systematic review of the pilots and their results can be found in the **DCDS Piloting and Evaluation Report**, document from which these notes are derived (<a href="http://www.dcds-project.eu/resources/">http://www.dcds-project.eu/resources/</a>).

#### 4.2 The pilots evaluation

The main results of the pilot evaluation have been as follows.

Evaluation of the DCDS methodology:

• In general the methodology was evaluated positively by all pilots participants.



- Learning content and learning outcomes were considered in general appropriate for digital competence levels 1-2 of Digital Competence framework.
- Blended learning approach was evaluated positively by both teachers and beneficiaries. However; depending on beneficiary audience, the proportion of F2F and independent online learning have been different in different countries and piloting sites.

#### Evaluation of DCDE online platform:

- All pilot participants were able to use the DCDE in their native languages; no problems of logging in to platform were observed.
- As the most useful elements of the DCDE platform the learning materials; exercises and presentation way and language were pointed out.
- Communication features of the platform (trainees-trainer; trainer-trainees) were evaluated with the lower scores and were not properly tested/used during the pilot.

External stakeholders, training partners and trainers have provided important recommendations for the DCDE platform updates which will allow to use it for real life exploitation.



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