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Abstract	This deliverable contains the Guidelines for
	teachers, i.e. a set of very practical instructions

	targeting teachers, to support them in the uptake of the main project outcomes (in terms of tools and methods proposed by the project), in view of the design and delivery of the pilot courses.
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1. Executive summary

This deliverable contains the Guidelines for teachers, i.e. a set of very practical instructions targeting teachers, to support them in the uptake of the main project outcomes (in terms of tools and methods proposed by the project), in view of the design and delivery of the pilot courses.

The Guidelines have been organized around topics (main theoretical aspects teachers need to be aware of), related scenarios (more practical suggestions on how to use the project outcomes in the pilots) and pills (video-tutorials that explain how to technically use/configure the Open Online Tool).

In order to make the Guidelines more usable and effective, we are also preparing a digital version of them, which will be offered (starting from October, 15th 2019) to the project teachers as a Follow up of the teacher training path (delivered last Spring/Summer).

A second release of these Guidelines will be delivered close to the end of the project, which will take into due account the feedback received from the teachers after use.

These guidelines, which should be considered as an integration to the Guidelines for VET providers (D3.2.1), will remain as a legacy, to provide comprehensive and detailed support to any teacher willing to design effective educational interventions starting from the Curriculum for FCN and the OOT.

2. Introduction to WP4

The main purposes of WP4 are:

- to develop an Open Online Tool (OOT) supporting FCNs' practice sharing and case studies; the tool will be at the heart of the learning activities proposed to nurses during the three national pilot courses;
- to participatory involve the teachers in the definition of the methods and the teaching and learning strategies that will be adopted during the pilots, as well as to co-design the activities that will be proposed to nurses;
- to develop accurate and detailed guidelines for future teachers to support their uptake of the Curriculum, consequent definition of new instances of courses, as well as identification of the correct methods and strategies to deliver new courses.

In particular, the OOT was developed under Task 4.1. The OOT platform was used in the teacher training (see below) and will be used again during the pilots. For details about the OOT refer to D4.1.1 and D4.1.2.

Under Task 4.2 the perspective teachers of the pilots were offered an e-learning training path, during which they were prompted to get familiarized with the main project outcomes and trained on how to take the most of them (for details see D4.2.2). At the end of the online course, teachers collaboratively designed a set of innovative collaborative activities to be delivered to nurses during the pilots. The training was delivered at a European level, i.e. teachers worked all together in a unique community (see D4.2.2 for details about the teacher training). Moreover, under the same task, a number of "Open Contents" were produced and stored in an online repository (see D4.2.1 for details about this). The Open Contents are (examples of) teaching/learning materials that were produced and used during the teacher training. The set will be further enriched subsequently with the materials used/adopted within the pilots and these will remain available and open to anyone even after the end of the project.

Lastly, under Task 4.3 the guidelines for future teachers need to be outlined. Their aim is to support future teachers to design effective learning activities starting from the localised curricula, and specifically how to use effectively the tools and methods proposed by the project (including the Open Online Tool, the EU Curriculum, the methods proposed by the project, etc.). This is the object of this deliverable. For this reason, in the following section we focus on Task 4.3.

3. Introduction to Task 4.3

Task 4.3 is about the definition of the Guidelines for teachers. The guidelines contain indications and methodological recommendations for teachers on how to use the outcomes/ tools proposed by the project, how to effectively customize them in view of the creation of a new instance of a course, as well as how to identify the most adequate teaching and learning methods for the course delivery.

A first, draft version of guidelines is delivered at month 21 (this document) and will be intensively used all throughout the pilot implementation.

To be noted that, in order to make the Guidelines more usable, we have decided to make them available also in a digital format, i.e. as a hyper textual and hyper medial document. This will be accessible to all the ENhANCE teachers through the Open Online Tool (starting from the 15th October, 2019) and will be launched as a Follow up of the teacher training course, that was delivered during Spring and Summer 2019 (see D4.2.2). Even if this was not originally envisaged in the proposal, the decision was taken to allow teachers who attended the teacher training to reinforce the acquired knowledge and skills and to provide them with practical and operative step-by-step indications on how to effectively design and configure their pilot courses. Moreover, teachers who were not able to attend the training, but are involved in the delivery of the pilots, will in this way be offered the possibility to catch up with the main contents proposed during the training.

After the conclusion of the pilots, the guidelines will be refined into a complete and final version (D4.3.2, due at M35), which will take into account the experience coming from all the different pilots, which will serve as a reference for future use of the EU Curriculum and other project outcomes. These guidelines, which should be considered as a compound of the Guidelines for VET providers (D3.2.1), will remain as a legacy for any teacher willing to design effective educational interventions starting from the Curriculum for FCN and the OOT.

4. Rationale and structure of this document

As stated in D3.1.1 (EU Curriculum) and D3.2.1 (Guidelines for VET providers), there are a number of innovative and central elements the project is aiming to specifically promote in the training of FCN. These include:

- Work based learning
- Practice sharing
- A learning-outcomes based student assessment
- Personalization of the learning path
- Validation and recognition of prior learning.

Additionally, the project also aims to promote online (or blended, i.e. mixed online and face-to-face) learning in FCN training contexts and for this reason an ad hoc digital platform has been developed (namely the Open Online Tool, see D4.1.1 and D4.1.2), which offers a number of functionalities aimed to support the innovative characteristics of the FCN EU Curriculum.

When a VET provider decides to use the FCN EU Curriculum, this first needs to be localized into a curriculum suited for the national context, after which the specific FCN training course can be designed, see Figure 1.

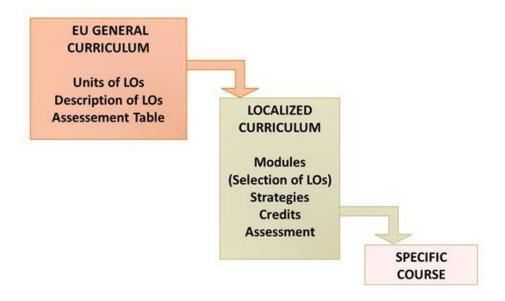


Figure 1 - Graphical representation of the progressive instantiation of the general EU Curriculum in a specific course (taken from D3.2.1)

In order to support the macro-level of design, the project developed the "Guidelines for VET providers" (D4.2.1), which guide VET providers in the localization process and then in the preliminary design choices to effectively implement in an effective way work-

based learning, practice sharing, student assessment, personalization of the learning path, validation and recognition of prior learning. In D3.3 you can find three examples of local curricula and related instances of courses for Finland, Italy and Greece.

Then, a micro-design level needs to occur, which is typically carried out by the perspective teachers of the course, who will need to design their own modules/teachings in details (see for example the detailed designs of teachings for the 3 project pilot courses, which are contained in D3.3).

In particular, at the micro-design level, teachers will need to take decisions regarding a number of aspects: some of them will directly derive from the macro-design level, others will be more specific and guided by the peculiarities of the knowledge domain concerned.

In particular, these decisions may regard:

- What are the main features of an online/blended course that fosters collaboration and self-regulated learning?
- How can I support online communication?
- How can I support collaboration among FCNs in my online/blended course?
- How can I support practice sharing among FCNs in my online/blended course?
- How can I design effective students' assessment in my online/blended course?
- How can I facilitate personalization for my students?
- How can I pave the way for the valorisation of my students' prior (nonformal/informal) learning, in such a way that my institution can validate and then recognize it?
- How can I support non only formal, but also non-formal and informal learning?
- How can I promote self-regulated learning and FCNs' continuous professional development?
- How can I support my students' motivation and engagement?
- How can I create Open Contents for my FCN training?

As already mentioned, the present document is intended as a set of Guidelines for teachers, to support them to take decisions on the above mentioned topics. For this reason, the remaining document is structured around the above listed items: each section is thus devoted to one question. Where the OOT is equipped with specific functionalities related to the question, additional instructions are provided to support teachers on the use of the OOT.

In particular, the document is structured into three levels:

- Topics = each topic addresses and tackles one of the above mentioned questions
- Scenarios = scenarios are possible solutions/suggestions for each topic

• Pills = video tutorials explaining the technical functionalities of the Open Online Tool to implement the above mentioned scenarios.

	Topic	Scenario	Pill (OOT functionality)
T1	What are the main features of an online/blended course that fosters collaboration and self-regulated learning?	Providing students with orientation materials Fostering socialization among students	Upload file (P1) Forum (P3) Webinar basic (P2) OOT Community (general) (P13)
		Promoting students' meta- reflection throughout the course	Forum (P3) Journal (P4)
T2	How should I support online communication?	Synchronous communication	Webinar (basic) (P2) Webinar advanced (P6)
		Asynchronous communication	Forum (P3)
Т3	How can I support collaboration among FCNs in my online/blended course?	Peer Review Jigsaw	Forum (P3) Webinar basic (P2) & advanced (P6) Database (P5) Forum (P3) Webinar basic (P2) &
			advanced (P6) Database (P5)
		Role Play	Forum (P3) Webinar basic (P2) & advanced (P6) Database (P5)
		Pyramid	Forum (P3) Webinar basic (P2) & advanced (P6) Database (P5)
		Debate	Forum (P3) Webinar basic (P2) & advanced (P6) Database (P5)
T4	How can I support practice sharing among FCNs in my online/blended course?	Case Study	Forum (P3) Webinar basic (P2) &

			advanced (P6)
			Database (P5)
T5	How can I design effective students' assessment in my online/blended course?	Teacher assessing knowledge	Quiz (P7) Assignment (P8)
		Teacher assessing	Assignment
		skills/competences	(P8)
		Teacher assessing collaborative activities	Reports (P9)
		Peer Assessment	Forum (P3) Webinar basic (P2) & advanced (P6) Database (P5)
T6	How can I facilitate personalisation for my students?	Personalizing learning pathways and learning contents	Groups (P10a) Group Choice (P10b)
T7	How can I pave the way for the valorisation of my students' prior (non-formal/informal) learning, in	Viewing your students' Learning Plans	Recognition of prior learning on the OOT
	such a way that my institution can validate and then recognize it?	Reviewing your students' Learning Outcomes	(P12)
T8	How can I support non only formal, but also non-formal and informal learning?	Encouraging non- formal/informal learning	OOT Community Portfolio (P11) OOT Community (general) (P13)
Т9	How can I promote self-regulated learning and continuous professional development of FCNs?	The 4C framework	4Cs Dashboard (P14) Forum (P3) Journal (P4)
T10	How can I support my students' motivation and engagement?	,	4Cs Dashboard (P14)
		Gamification with points and badges	Level up (P15) Badges (P16)
T11	How can I create Open Contents for my FCN training?	Creating OERs	OER creation (P17a)
		Sharing OERs	Adding Open Contents (P17b)

5. T1 - What are the main features of an online/blended course that fosters collaboration and self-regulated learning?

Within the Technology Enhanced Learning research field, many researchers have pointed out the importance of an accurate design process when a teacher proposes online or blended learning activities, especially if s/he wants to foster collaboration and self-regulated learning. In particular, in the last decades the field of Learning Design has devoted considerable attention to the variables at play when a teacher plans and manages online learning activities (Persico, Pozzi & Goodyear, 2018).

If you want to learn more about the Learning Design research field, in the ENhANCE Open Contents Repository you can find the following useful resources:

- Slides:
 - ENhANCE Teacher training M3 Basics of collaborative learning and learning design.
- One article:
 - The Larnaca Declaration on Learning Design (Dalziel, Conole, Wills, Walker, Bennett, Dobozy, Cameron, Badilescu-Buga, & Bower, 2016).

Without any ambition to be exhaustive, below, you can find very practical suggestions you might take into account, when designing your online /blended course.

For further readings

Persico, D., Pozzi, F., & Goodyear, P. (2018). Teachers as designers of TEL interventions. British journal of educational technology, 49(6), 975-980.

5.1 Scenario 1A - Providing students with orientation materials

Especially if you are delivering a course entirely online, you should take into account that your students will need to be oriented in the digital environment (i.e. the Learning Management System where the course is delivered) and understand what they are expected to do. For this reason, it is recommended that teachers prepare and upload on the digital environment a Course Guide, where they describe in details the learning outcomes students are expected to reach, the envisaged activities and time schedule, etc. This document is essential to start an online (or blended) course, but will be used also later on, as a reference document for the whole duration of the course by students. In the ENhANCE Open Contents Repository you can find an example of a Course Guide. As you can see from the example a Course Guide is usually aimed at presenting

the whole course and should be prepared by the course coordinator. If this is not the case, you might consider preparing a short guide, which presents at least your own modules /teachings.

Similarly, students will need to access a User Manual that describes the learning environment they are going to use. In the ENhANCE Open Contents Repository you can find an example of a <u>User Manual</u>.

In the ENhANCE pilot courses, a User Manual presenting the Open Online Tool is made available to your students on the course home page at the top – see Figure 1).

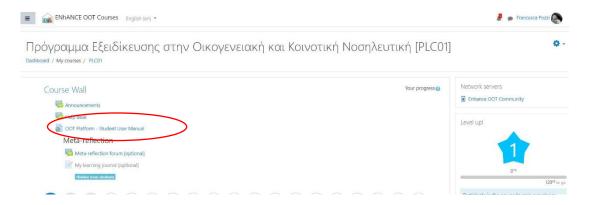


Figure 1 – The OOT User Manual available on the Greek pilot course

If you are planning to use the basic functionalities as presented in the User Manual (and in these guidelines), there will be no need to make any integrations. Of course, if you plan to adopt additional functionalities, you will need to present them to your students and consider adapt the User Manual accordingly.

For ease of access, you may want to upload these guidelines (or any other relevant documentation) on the OOT. To learn how to do this, please click on the following link:

Upload file (P1)

5.2 Scenario 1B - Fostering students' socialization

Especially if are working with an entirely online course, an initial socialization activity should *always* be used to open the course. Socialization in this context means *with peers*, but also *with the learning environment* as a whole. One possibility is to propose an ice-breaking activity at the very beginning of the course, i.e. a plenary discussion, asking students to introduce themselves to others, possibly asking them to describe their background and expectations for the course. This will allow teachers

to get to know them, but will also allow them to familiarize as a group and to create a friendly climate, especially in view of future collaborative activities.

It is also advisable to introduce some gamification elements in this phase, for example by proposing metaphors, storytelling elements, etc. (see also <u>T10 "How can I support my students' motivation and engagement?"</u> for further suggestions about this).

These types of socialization activities are usually carried out via asynchronous communication tools, for example in Forums. To learn how to do it on the OOT, follow the following link:

• <u>Forum (P3)</u>

Below you can find an example of a message in a Forum, aimed to launch a socialization activity (Figure 2).

Welcome to this course!

Before starting with the actual contents of this course, we propose you to start with a socialization activity, aimed to allow you to familiarize with your peers and with this online environment. To do so, we propose to reply to this message and provide some basic information about yourself: who you are, what is your background, what your current working context is, etc. We also propose you to say a few words about your expectations about this course....

Figure 2 – Example of a socialization message in the Forum

Of course, you can also consider launching your course, as well as the socialization activity, during a synchronous event. To learn how to do this on the OOT, click on the following link:

• Webinar (basic configuration) (P2)

Moreover, it is important that your students continue this socialization and network throughout (and even more at the end of) the course, you might consider fostering the creation of informal networking among them. In this case, you can trigger your students to use the specific OOT functionality that is available for that, i.e.

OOT Community (general) (P13)

If you want to learn more about how to support informal networking among your students, you can follow the link: T8 "How can I support non only formal, but also non-formal and informal learning?".

5.3 Scenario 1C - Promoting students' meta-reflection throughout the course

Meta-reflection (i.e. the process of reflecting on own learning process) is also an important element in online learning environments, so there are strategies that you can use to support your students during the course. Meta-reflection is a component of self-regulation, so if you want more information about how you can promote self-regulated professional development of your FCN students, you can follow the link: <u>T9 "How can I promote self-regulated learning and continuous professional development of FCNs?"</u>.

In the ENhANCE pilot course, we have created a digital space (i.e. the "Meta-reflection" Forum) where the students will be invited to reflect on the learning process. In this virtual space, we will introduce the character of "Nurse Sally", a sort of virtual tutor who will show up every now and then in this forum to prompt meta-reflection.

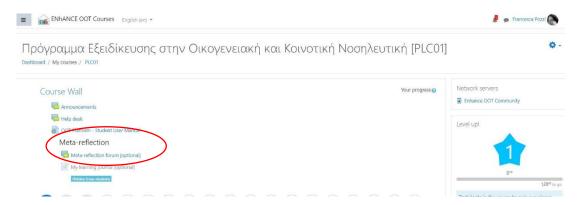


Figure 3 – The Meta-reflection Forum on the Greek pilot course

Moreover, at a certain point during the course, Nurse Sally will introduce the "Journal", a sort of personal diary, where students will be invited to reflect on the course as a whole, on the difficulties they are facing, the learning objectives they are trying to achieve, etc.

Thus, the OOT has been devised with two specific functionalities aimed to support meta-reflection:

- Forum (P3) (for group meta-reflection)
- <u>Journal (P4)</u> (for individual meta-reflection).

As a teacher of the ENhANCE course, you are not required to carry out any specific activity about this, but you must be aware this taking place and – if you like – within your own module/teaching you can consider using it and invite your students to make use of these additional virtual spaces.

6. T2 - How can I support online communication?

In online learning, the technology mediates communication between all the actors involved in the learning process, while in blended learning, technologies are used to complement face-to-face training activities, by taking advantage of each mode of communication to the best of its potential.

In both cases, technologies can be used to support at a distance both traditional teaching activities, such as lectures, and also more innovative teaching practices. As to the latter, recent research on the way learning takes place has determined a shift from a vision of teaching as knowledge transfer, to one where learners take an active and even proactive stance and thus build their own knowledge by interacting with peers and experts. In this "socio-constructivist" vision of learning, people learn by negotiating meanings and sharing practices (Anderson, 2008; Wenger, 1999). This vision of learning is important not only for formal learning contexts, but also for informal, lifelong learning. In particular, it is at the basis of a modern conception of continuous professional development in many fields, including medical science. The affordance of today's technologies, and in particular of the Web, lend themselves very well to implement teaching and learning processes aligned with socioconstructivist ideas, because the web augments people's ability to reach out for peers, colleagues, experts and other resources, thus giving rise to new forms of collaboration.

Roughly speaking, web-based communication can be synchronous or asynchronous. These modalities have distinct features that lend themselves to different types of teaching and learning scenarios, ranging from transmissive scenarios, to collaborative ones. Depending on the learning outcomes set for your students and on the contextual constraints, you will need to choose when to use one or the other. The following two scenarios will support your choices.

For further readings

Anderson, T. (Ed.). (2008). The theory and practice of online learning. Athabasca University Press.

Wenger, E. (1999). Communities of practice: Learning, meaning, and identity. Cambridge university press.

6.1 Scenario 2A - Synchronous communication

Synchronous communication sessions, like for example webinars, lend themselves particularly well to present extensive content to a (potentially large) audience. These

are the online equivalent of traditional lectures. However, in webinars, eye contact between the speaker and the audience is missing, so the speaker needs to resort to some techniques to engage the audience and check that they are following the presentation. To this end, presentations can be made more lively and engaging through the use of some simple expedients, like pausing to ask questions to the audience. These questions usually serve the purpose of interrupting the flow of information by prompting participants' reflection on content or checking understanding. In addition, the speaker should make sure that participants can ask questions and that someone (usually not the speaker) keeps track of the questions and makes sure they are answered in the course of the presentation. Webinars can also be used for quick decision making through small group discussions or polling.

Among the downsides of synchronous communication, it should be mentioned that it requires the simultaneous presence of the target audience and should therefore be organised well in advance. Recordings of sessions will make it possible for those who were not present to catch up with content, but it will not make up for the missing interactivity.

The OOT has been featured with one specific functionality aimed to support synchronous communication:

- Webinar (basic configuration) (P2)
- Webinar (webinar advanced) (P6)

6.2 Scenario 2B - Asynchronous communication

Asynchronous communication is mostly suited when the emphasis is on peer to peer communication aimed at discussing possible solutions to a problem or collaboratively producing artefacts in relatively small groups. This modality is more in line with socio-constructivist learning theories, because the permanent nature of the messages facilitates reflection on content. It also has great advantages because it leaves participants relatively free to choose the content and time of their contributions, allowing each individual to contribute on the basis of their own competence, dispositions and time constraints. This is particularly useful when participants are spread across different time zones or have limited time to stay online.

Using this mode of communication in the ENhANCE courses is important because FCNs will need to get used to it, since they will be engaged in field work and this may prevent them from using synchronous communication frequently while they work.

If you want to learn more about how to support collaboration among FCNs, you can follow the link T3 "How can I support collaboration among FCNs in my online/blended course?"

If you want to learn more about how to support practice sharing among FCNs, you can follow the link T4 "How can I support practice sharing among FCNs in my online/blended course?"

The OOT has been featured with one specific functionality aimed to support asynchronous communication:

• Forum (P3).

7. T3 - How can I support collaboration among FCNs in my online/blended course?

"Simply put, collaboration entails working together toward a common goal". Based on this simple definition, Caroline Haythornthwaite (2006) engages in a discussion of how collaborative learning takes place, how teachers can scaffold collaborative learning processes, and how the differences between online and offline communication affect collaborative learning processes. However, according to Randy Garrison (2006), designing an online collaborative learning experience is a "daunting challenge". The reason is that "truly collaborative" learning processes are not easy to achieve. Especially if by "truly collaborative" we mean that there should be not only a joint enterprise (the "common goal" mentioned above), but also a mutual engagement of all participants to achieve that goal. This difficulty is corroborated by the experience of many online teachers and students who have witnessed failed attempts to start up online collaborative learning processes. Sometimes, collaboration simply does not take off due to lack of participation, some other times, people participate but contributions to the discussion are too shallow or efforts are too isolated so that there is no negotiation of meaning and no convergence towards the goal. The truth is that in most cases setting up a forum to host a discussion is not enough to ignite collaboration. There must be a clear definition of the common goal, i.e. the product – or artefact - that participants should produce together, and a clear plan about how to proceed. In other words, each participant should know, especially at the beginning, when, where, how and with whom they should work (Pozzi & Persico, 2011). In time, research in learning design and collaborative learning has come up with the definition of a number of "collaborative techniques", i.e. structured methods to scaffold group interactions, in terms of time, social structures, technology to be used and task to be performed. These collaborative techniques have been derived from similar methods already consolidated in face-to-face settings. Some of the most well-known are: Peer Review (see Scenario 3A - Peer Review), Jigsaw (see Scenario 3B - Jigsaw), Role Play (see Scenario 3C - Role Play), Pyramid (see <u>Scenario 3D – Pyramid</u>), and Debate (see <u>Scenario 3E – Debate</u>).

Even when none of the above techniques is used, the decision making process about the *Task* to be accomplished, the *Technology* that can be used, the *Time* needed for each phase of work and the structure of the *Team* is the core of the learning design process for collaborative learning. The "4Ts model" describes how decisions are made, considering the reciprocal influence of these 4 variables (Pozzi, Ceregini &

Persico, 2016). If you want to use the 4Ts model to design a collaborative learning activity, you can use the <u>4Ts template</u> available on the Open Contents Repository, which will scaffold your design process.

If you want to learn more about Learning Design and online collaborative learning, in the Enhance Open Contents Repository you can find:

Slides:

 ENhANCE Teacher training M3 - Basics of collaborative learning and learning design

Moreover, in the same Repository, you will also find examples of already designed collaborative techniques addressing some of the learning outcomes of the <u>EU FCNs</u> <u>Curriculum</u>:

- ENHANCE collaborative activity for Family and Community Nurses training -Psychosocial issues in Chronic and rare diseases.
- ENHANCE collaborative activity for Family and Community Nurses training -Assessing the risk of frailty in older people.

In the following scenarios you can find the description of a number of collaborative techniques, as well as indications on how to design them.

For further readings

Garrison, D. R. (2006). Online collaboration principles. Journal of Asynchronous Learning Networks, 10(1), 25-34.

Haythornthwaite, C. (2006). Facilitating collaboration in online learning. Journal of Asynchronous Learning Networks, 10(1), 7-24.

Pozzi, F., Ceregini, A., & Persico, D. (2016). Designing networked learning with 4Ts. In S. Cranmer, N.B. Dohn, M. de Laat, T. Ryberg & J.A. Sime (Eds.). Proceedings of the 10th International Conference on Networked Learning 2016 (pp.210-217).

Pozzi F., Persico D. (eds) (2011). Techniques for Fostering Collaboration in Online Learning Communities. Theoretical and practical perspectives. IGI Global, Hershey:NY, pp.397

7.1 Scenario 3A – Peer Review

The Peer Review technique usually involves three phases; in the first phase the students produce an artefact (e.g. a document, a map, an oral presentation); in the second students are asked to provide feedback on the artefact produced by someone else in the first phase, in the third and last phase they modify their original artefact based on the feedback received. The peer review is based on "reciprocal teaching" principles, according to which it is essential that students compare the

product of their work to that of their peers. The reflection triggered by the comparison (during the second phase) has positive impact on self-assessment skills, especially when a rubric is provided, in the form of a list of criteria informing the feedback. Learning is therefore the compound outcome of the self-assessment engendered by both the feedback received and the feedback given. With this technique, there is a wide range of choices concerning team arrangements: students can work in dyads with reciprocal feedback, or they could work in teams and provide a feedback negotiated within the group, or even work in teams in the first phase and then provide individual feedback to one or more of the teams.

The peer review technique has for instance been used in nursing education by Kuage & Larson (2016) to run a f2f workshop on manuscript writing and by Bonnel (2008) in an online environment.

Time	3 phases		
	Phase 1	Phase 2	Phase 3
Task	Artefact production	Artefact analysis and feedback production	Revision of original artefact based on feedback
Team	Individual work, dyads or small groups	Individual work, dyads or small groups	Same teams as phase 1
Technology	Text editor or other productivity tool	Text editor or other productivity tool	Text editor or other productivity tool

The OOT has been featured with three specific functionalities aimed to support the Peer Review:

- the <u>Forum</u> if you want the discussion among students to happen in asynchronous mode (P3)
- the Webinar (basic configuration) (P2) and the Webinar advanced (P6) if you want the discussion among students to happen in synchronous mode
- the <u>Database (P5)</u> where your students will share their final artefacts.

For further readings

Bonnel, W. (2008). Improving feedback to students in online courses. Nursing Education Perspectives, 29(5), 290-294.

Kulage, K. M., & Larson, E. L. (2016). Implementation and outcomes of a faculty-based, peer review manuscript writing workshop. Journal of Professional Nursing, 32(4), 262-270. Day

7.2 Scenario 3B - Jigsaw

The Jigsaw technique entails two phases: a first phase where so called "expert" groups are formed and a second phase carried out by "jigsaw (or home) groups".

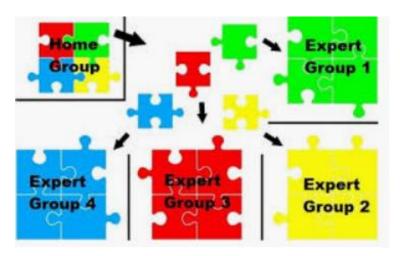


Figure 4 - The Jigsaw

The Task of each of the expert groups will be to study in depth a different aspect of a topic (or case or problem). In the second phase, teams are rearranged into jigsaw groups which should include at least one member for each of the expert groups. The task of the jigsaw groups is to produce for example written or oral presentations or other types of products, reflecting all the different facets of the problem studied in the first phase. Thus, each expert of the jigsaw will bring to the group the competence acquired in the first phase and his/her contribution will be essential to produce a comprehensive artefact.

This method suits topics that can be studied under different facets. For example, Charania, Kausar, and Cassum (2001) describe how they used jigsaw in nursing education where faculty identified four important concepts related to fractures: pain, inflammation, immobility, and stress management. In this example, the different expert groups were asked to deepen each concept and the jigsaw groups to prepare a presentation of a collaboratively defined approach to caring for a patient with a fracture. Even if this activity took place f2f, the same could be carried out online. Similarly, the jigsaw method was used by Buhr and colleagues (2014) to engage students with the institutional long term and postacute care setting and the roles of personnel there.

Time	2 phases	
	Phase 1	Phase 2
Task	Individual study of the theme to cover one aspect of it Collaborative production of a synthesis/presentation	Collaborative production of an artefact
Team	Expert groups (e.g. 4 small groups of 4)	Jigsaw groups (e.g. 4 groups containing one member for each expert group)
Technology	f2f or forum	f2f or forum

The OOT has been featured with three specific functionalities aimed to support the Jigsaw:

- the <u>Forum</u> if you want the discussion among students to happen in asynchronous mode (<u>P3</u>)
- the Webinar (basic configuration) (P2) and the Webinar advanced (P6) if you want the discussion among students to happen in synchronous mode
- the Database (P5) where your students will share their final artefacts.

For further readings

Buhr, G. T., Heflin, M. T., White, H. K., & Pinheiro, S. O. (2014). Using the jigsaw cooperative learning method to teach medical students about long-term and postacute care. Journal of the American Medical Directors Association, 15(6), 429-434.

Charania, N. A. M. A., Kausar, F., & Cassum, S. (2001). Playing jigsaw: A cooperative learning experience. Journal of Nursing education, 40(9), 420-421.

7.3 Scenario 3C – Role Play

With this technique, participants engage in "role play", i.e., they put themselves in the shoes of someone else (whose perspective on the content is different from their own) so that they better appreciate the other person's point of view. There are two phases to this technique: the first phase entails role uptake and study of materials (keeping an eye on the role taken), the second entails producing a common artefact by negotiating with peers its content from the perspective previously assumed.

This technique has been used in nursing education, for example, in order to recreate meaningful and realistic simulations in mental health nursing. In the example

(Saunder, 2016) students were allocated professional roles such as the community mental health team manager, community psychiatric nurse, child and family social workers, school safeguarding lead, occupational health nurse, substance misuse nurse, psychiatrist and staff.

Time	2 phases	
	Phase 1	Phase 2
Task	Role uptake and study of material	Negotiation and production of a shared artefact (each member assumes the assigned perspective)
Team	Individual work	Small groups
Technology	f2f or forum	f2f or forum

The OOT has been featured with three specific functionalities aimed to support the Role Play:

- the <u>Forum</u> if you want the discussion among students to happen in asynchronous mode (P3)
- the Webinar (basic configuration) (P2) and the Webinar advanced (P6) if you want the discussion among students to happen in synchronous mode
- the <u>Database (P5)</u> where your students will share their final artefacts.

For further readings

Saunder, L. (2016). On-line role play in mental health education. The Journal of Mental Health Training, Education and Practice, 11(1), 1-9.

7.4 Scenario 3D – Pyramid

The Pyramid is used when there is a need for convergence of a large group on a shared solution for a complex problem, (i.e. one that does not have only one right solution), and usually has at least three phases. In the first phase, each student devises a solution to the problem. In the second phase, dyads or groups of three work together by comparing the individual solutions to come up with an even better one by negotiating between the individual solutions. In the subsequent phases, groups merge and participants build new "shared" solutions based on those elaborated during the previous phase, until the whole cohort of students produces a single solution progressively built on top of the pre-existing ones. A search on the

web-of-science reveals that this technique is hardly used in health care staff education. However, mediating from other disciplines, one possible example is to ask students to rank, in terms of priority, a set of items (for example, all the first aid items they would advise a patient to keep at home, or prepare a list of frequently asked questions for patients and rank them in order of importance).

Time	3 phases		
	Phase 1	Phase 2	Phase 3
Task	Individual work to produce an artefact or solution	Artefact comparison and production of a new shared artefact	Artefact comparison and production of a shared new artefact
Team	Individual students	dyads or small groups	Progressively larger groups until whole cohort
Technology	Text editor or other productivity tool	Text editor or other productivity tool	Text editor or other productivity tool

The OOT has been featured with three specific functionalities aimed to support the Pyramid:

- the <u>Forum</u> if you want the discussion among students to happen in asynchronous mode (P3)
- the Webinar (basic configuration) (P2) and the Webinar advanced (P6) if you want the discussion among students to happen in synchronous mode
- the Database (P5) where your students will share their final artefacts.

7.5 Scenario 3E – Debate

The Debate technique has a low degree of structuredness, where we can distinguish two main phases: in the first phase students are asked to study learning material concerning a given problem (case or theme) assigned by the tutor, while in the second phase they work in groups to negotiate their solution to the problem and produce an artefact reflecting the negotiation results. The debate technique lends itself to tackling complex problems such as, for example, case studies, where critical thinking, reflection and creativity need to be fostered and the asynchronous nature of the interactions facilitates reflection. According to Day (2011), in nursing education "the subject at the center is the nurse-patient/client/family/community relationship that

informs nurses about what they should pay attention to". To do so, she proposes "unfolding case studies", an approach that departs from the idea of a case study as a lecture on a case, but rather uses the Debate technique to put students in an active role. In this approach, at different stages of the learning process teachers prompt students to delve deeper into the case. Online debate can be used in one or more of these steps, provided that the teacher makes sure they allocate sufficient time for it and sustain active participation of students. To ensure convergent debates, it is essential that the task in the second phase requires the production of a common artefact.

Time	2 phases		
	Phase 1	Phase 2	
Task	Study of material	Collaborative production of an artefact	
Team	Individual work	Small groups	
Technology	Web or other (digital) resources	Forum	

The OOT has been featured with three specific functionalities aimed to support the Debate:

- the <u>Forum</u> if you want the discussion among students to happen in asynchronous mode (P3)
- the Webinar (basic configuration) (P2) and the Webinar advanced (P6) if you want the discussion among students to happen in synchronous mode
- the <u>Database (P5)</u> where your students will share their final artefacts.

For further readings

Day, L. (2011). Using unfolding case studies in a subject-centered classroom. Journal of Nursing Education, 50(8), 447-452.

8. T4 - How can I support practice sharing among FCNs in my online/ blended course?

Practice sharing is an essential element at the basis of continuous professional development, especially in knowledge-intensive fields, i.e. fields where declarative knowledge is not sufficient to be a competent professional, because complex problemsolving abilities and other high-level cross-sectional competencies like ethical conduct are also essential. Medical practice is one such field, as doctors, as well as nurses, everyday face challenging issues that require not only up-to-date evidence-based medical knowledge, but also the ability to fully understand the complexity of the patients' health conditions and well-being to make decisions about how to deal with them. FCNs are no exception to this, with the additional difficulty determined by the potential isolation of those who work "alone in the field". Web-based technology, however, can be of great help in practice sharing because it allows the creation of virtual "communities of practice" (Lave & Wenger, 1991) of FCNs who can keep in touch and share their experiences, discuss the problems they face and the solutions they adopt with peers, as well as experts who can support them remotely. The importance of practice sharing, debate and discussion of case studies in FCN training contexts has already been addressed in D3.2.1 Guidelines supporting the design of local curricula.

However, the attitude and ability to participate in these communities cannot be taken for granted. The self-regulated learning skills needed to take advantage of technology for professional learning must be developed during FCN training and are as important as the medical competence because they ensure life-long learning. Littlejohn, Milligan and Margaryan, (2012) have proposed a framework to describe the type of behaviours that are adopted by self-regulated learners in knowledge intensive professions: the 4Cs framework This framework distinguishes between 4 types of behaviours: "Consume", "Create", "Connect" and "Contribute" behaviours (see also T9 "How can I promote self-regulated learning and continuous professional development of FCNs?" and the related scenario 9A "The 4C framework" for details about the 4Cs). These are the behaviours FCNs should develop to practice during your course, in order to become able to self-regulate their own learning in their profession. These behaviours represent the actions that are at the basis of practice sharing.

For further readings

Lave, J., & Wenger, E. (1991). Situated Learning: Legitimate Peripheral Participation. Cambridge: Cambridge University Press.

http://dx.doi.org/10.1017/CBO9780511815355

Littlejohn, A., Milligan, C., & Margaryan, A. (2012). Charting collective knowledge: Supporting self-regulated learning in the workplace. Journal of Workplace Learning, 24(3), 226–238.

8.1 Scenario 4A - Case Study

Practice sharing behaviours in health science are frequently based on case study approaches. The way case studies are implemented can vary a lot, from teacher centred cases, where the teacher illustrates exemplar practice, to cases used to trigger problem solving by the students under the teacher's guidance with a problem-based learning approach, to the so-called "unfolding case studies" (Day, 2011; Dutra, 2013), where the patient and his/her family and household are the focus of attention and a fully-fledged inquiry process is carried out collaboratively by teacher and students, thus simulating real-life behaviour of expert staff. Unfolding case studies lend themselves very well to foster not only the learning of declarative knowledge, procedural skills and know-how, but also ethical conduct, an often neglected aspect of nursing education (Benner et al, 2009).

Whatever the approach adopted, case studies are a very effective way to share practice between teachers and students, both in formal and informal contexts, based as they are on authentic problem solving scenarios. In your course, you can give a case and provide your students with the solution for them to discuss, or ask them to analyse the case and try to work out a solution, collaboratively or individually. You can also combine the two.

Collaborative learning approaches fit very well with case studies, and almost all the collaborative techniques can be adopted to scaffold the learning process (see <u>T3 "How can I support collaboration among FCNs in my online/blended course?"</u> for more details about collaborative techniques).

For example, the Debate technique (see <u>scenario 3E "Debate")</u> can be implemented by devoting the first phase to individual analysis of the case and the second phase to the collaborative production of the case solution. Alternatively, a Peer Review (see <u>scenario 3A "Peer Review")</u> could be implemented where the first phase is devoted to

developing individual case solutions, the second to producing feedback on one or more solutions produced in the first phase and the third is devoted to implementing changes to the original solution based on the feedback received. Another example is the application of a Role Play (see scenario3C "Role Play") to implement the case study, where different roles correspond to the different medical professionals needed to solve the case. Different solutions provided by the students can also be compared with one another through a pyramid technique to trigger discussion on possible alternatives and produce a synthesis. The Jigsaw technique (see scenario3B "Jigsaw">scenario3B "Jigsaw") could be used to split among different students the different aspects of the case that need to be analysed in the Expert groups and then ask the Jigsaw groups to devise a solution that takes into consideration all of the aspects analysed.

Whatever collaborative technique you use, the case study implementation in the OOT will require the use of Forums, possibly with different groups working in parallel:

Forum (P3)

Of course, you can also use webinars, if you want to allow for synchronous discussion of the case study, which has the advantage of being much faster:

Webinar (basic configuration) (P2) and Webinar advanced (P6).

For further readings

Benner, P., Sutphen, M., Leonard, V., & Day, L. (2009). Educating nurses: A call for radical transformation. San Francisco, CA: Jossey-Bass.

Day, L. (2011). Using unfolding case studies in a subject-centered classroom. Journal of Nursing Education, 50(8), 447-452.

Dutra, D. K. (2013). Implementation of case studies in undergraduate didactic nursing courses: a qualitative study. BMC nursing, 12(1), 15.

9. T5 - How can I design an effective student assessment in my online /blended course?

The issue of assessment is central in view of outcomes achievement. Assessment should be considered from the very beginning, therefore from the moment the teacher starts designing his/her teaching; assessment should be aligned with the learning objectives and the teaching method adopted.

If you want to learn more about assessment in relation to the competences of FCNs European Curriculum see:

- the Guidelines for assessment in <u>D3.2.1 "Guidelines supporting the design of local curricula first release"</u>, that describes the different assessment methods (written exam, oral exam, assessment of work based learning, simulation/skis demonstration, assessment based on other data) that could be adopted in the course.
- the Assessment Matrix and Plan described in in <u>D3.3 "Instructional Design</u> documents of three national curricula and pilot courses".

Here, we do not intend to tackle the discourse about assessment from a theoretical viewpoint, our purpose is to provide practical suggestions related to on-line/blended learning assessment, which in ENhANCE was categorized as: "Assessment based on other data (OTH)".

The first aspect to be considered can be the adoption of formative and summative assessment, in this sense we can give these general recommendations:

- Formative assessment is always valuable, in case of on-line learning it allows
 the student to get a clearer perception of his/her progression in the course
 (strengths/weaknesses) and the teacher can adjust the subsequent activities
 accordingly. For this reason, we suggest the introduction of formative
 assessment activities in your online or blended course.
- Summative assessment in on-line courses can be carried out in several ways (e.g.: assignments, quizzes, etc.); the result of the summative assessment usually compounds the results of the (oral and/or written) final exam and is thus taken into consideration to draw the student's final marks.

Another important aspect to be considered is the alignment between assessment and the envisaged learning outcomes envisaged (knowledge, skills, competences): even though in most online courses quizzes are used to assess the student's learning outcomes, this method can provide limited information, especially if the course aims to develop also skills and competences.

In the following scenarios, you can find practical suggestions about how to design assessment in your course.

9.1 Scenario 5A – Teacher assessing knowledge

If you have asked your students to study a topic from the theoretical view point, for example by reading or searching materials or attending a lecture, you need to assess if students achieved the learning outcomes in terms of knowledge (what they know) and not in term of skills (what they are able to do).

So for example, if in your course you have tackled the Learning Outcome 'Outline, identify and select the proper guidelines, procedures and validated tools for the definition of the outcomes' (LO9a of the EU FCN Curriculum), you should ask your learners to demonstrate the related acquired theoretical info.

Thus in this case, you can:

- deliver a quiz
- ask your students to write a report or prepare a presentation (individually or collaboratively). If you want to learn more about how to design a collaborative activity, you can follow the link <u>T3</u> "How can I support collaboration among <u>FCNs in my online/blended course?"</u> and then you go to scenario 5C Teacher assessing collaborative activities to know more about how to assess it.

Both the quiz and the report/presentation can be used to give your students feedback about their progress (formative assessment), as well as for an intermediate or final grading (summative assessment).

The OOT has been featured with specific functionalities aimed to support knowledge assessment:

- Quiz (P7)
- Assignment (P8) (for delivering reports or presentations).

9.2 Scenario 5B – Teacher assessing skills/competences

If you want to assess whether your students have learned how to deal with a problem or a situation related to their profession, you need to assess their acquired skills and/or competences. This is usually more challenging than assessing knowledge (both in face-to-face, as well as in online contexts) and requires the implementation of other forms of assessment, rather than a quiz.

For example, if you want to assess the skill mentioned in the EU FCN Curriculum: 'Use standardized and validated tools to evaluate his/her own practice (LO10a)', you should ask your students to put into practice what they have learnt and not ask them to simply answer some questions or report theoretical information. To do so, in face-

to-face contexts, teachers can, for example, go for a simulation or observe the student while he/she is facing a concrete situation.

In an online course, instead, you can ask your students to write an essay, in which they report a concrete situation (experienced or envisaged) and describe how they (would) deal with it. This activity can be proposed both at individual or group level. If you want to learn more about how to design a collaborative activity, you can follow the link T3 "How can I support collaboration among FCNs in my online/blended course?" and then you go to scenario 5C – Teacher assessing collaborative activities to know more about how to assess it.

Asking your students to discuss a case study with peers, is also another possibility to assess skills and competences. If you want to learn more about how to set up an online Case Study, you can follow the link to the <u>scenario 4A Case Study</u>.

Note that skills and competences assessment can be carried out during the course (for formative assessment) or at the end (for summative assessment).

The OOT has been featured with specific functionalities aimed to support skills/competence assessment:

Assignment (P8) (for delivering essays).

9.3 Scenario 5C – Teacher assessing collaborative activities

If you set up a collaborative activity for your students, you should assess the individual contribution to the process, besides grading or giving a feedback on the artefact resulting from this activity.

In an online environment, you can for example track the individual contribution to the collaborative activity in terms of quantity (e.g. access to the study materials, contributions/posts in the online discussion) and quality (e.g. quality of the contributions/posts in the online discussion).

The OOT presents a feature that helps you monitor the individual participation; it is a reporting tool enabling the teacher to follow the participation of students in the course at different levels (logs, posts, etc.) and to access to the contents of the posts, therefore allowing a qualitative analysis of the contributions:

• Report (P9)

This kind of information can be also provided by the student by accessing his/her own profile.

9.4 Scenario 5D - Peer Assessment

In a peer assessment process, students are expected to critically analyse artefacts produced by other students and provide their peers with a feedback, which can be either quantitative or (more often) qualitative.

The peer assessment process supports and enhances learning for both parties involved (the one who receives the feedback and the one who provides it): by reviewing their colleagues' artefacts, students take an active role, can practice cross-sectional skills (critical thinking), can reflect on their own learning by comparing themselves with their peers, and learn how to give constructive feedback. Moreover, relying on peer assessment can have the (non-trivial) side effect of lightening the teacher's workload.

Peer assessment is usually used as a formative assessment method and can be organized in the form of a Peer Review collaborative technique. If you want to learn more about how to set up an online Peer Review, you can follow the link to the scenario 3A Peer Review.

The OOT has been featured with three specific functionalities aimed to support the peer assessment:

- the Forum if the reviewing process happened in an asynchronous mode (P3)
- the Webinar (basic configuration) (P2) and the Webinar advanced (P6) if the reviewing process happened in an synchronous mode
- the <u>Database (P5)</u> where your students will share and exchange their artefacts.

Note that providing a rubric to students to scaffold the reviewing process might help and contribute to collect more structured and effective feedback. In the Open Contents Repository you can find an <u>example of a rubric</u> for a Peer Review.

10. T6 - How can I facilitate personalization for my students?

Personalised learning is a potential approach to meeting educational needs and may provide new alternatives that foster the learning capacity of individual learners (Bentley and Miller, 2004; Järvelä, 2006).

There may be different levels of personalisation within a training intervention. Personalised learning should be considered in terms of its multiple dimensions: the personalisation of why something is to be learned, of how it is to be learned, of what is to be learned, of when is to be learned, of who is involved in the learning, and of where the learning takes place (Holmes et al., 2018).

Technologies can be effectively used for providing individual support and guidance to students, especially with respect to what is to be learned, that is the flexibility of the learning pathway and the access to the learning content.

If you want to know more about personalisation in relation to the competences of FCNs European curriculum see:

 The <u>Guidelines supporting the design of local curricula in D3.2.1</u>, that presents possible future directions to support personalisation in FCN training.

Without any ambition to be exhaustive, in the following you can find very practical suggestions you might take into account, when designing your personalised learning.

9.1 SCENARIO 6A – Personalising learning pathways and learning contents

Guaranteeing flexibility to your students means giving them the possibility to choose among different learning contents (in terms of format, level of difficulty, etc.) and/or different pathways (for instance, depending on their prior knowledge). This would motivate students and help them in retaining a high level of attention throughout the course, with positive effects on learning.

To provide your students with different learning pathways and different learning contents in an online course, you can assign students to one or to several groups. Or you can set up groups, so that students assign themselves. Furthermore, you can restrict access to an entire topic within a course.

To learn how to do it on the OOT, follow the following link:

Groups (P10a) (for creating groups and adding users to the groups)

• Group Choice (P10b) (for giving options to groups).

For further readings

Bentley, T., & Diller, R. (2004). Personalised Learning: Creating the Ingredients for Systemic and Society-wide Change. IARTV.

Holmes, W., Anastopoulou, S., Schaumburg, H., & Mavrikis, M. (2018). Technology-enhanced Personalised Learning: Untangling the Evidence.

Järvelä, S. (2006). Personalised learning? New insights into fostering learning capacity. ocde-ceri (eds.), Personalising Education. París: ocde/ceri, 31-46.

11. T7 - How should I pave the way for the valorisation of my students' prior (non-formal/informal) learning, in such a way that my institution can validate and then recognize it?

Validation of non-formal/informal learning "means the process of confirmation by a competent authority that an individual has acquired learning outcomes acquired in non-formal¹ and informal² learning settings measured against a relevant standard and consists of the following four distinct phases: identification through dialogue of particular experiences of an individual, documentation to make visible the individual's experiences, a formal assessment of those experiences and certification of the results of the assessment which may lead to a partial or full qualification" (European Council 2017).

In this context, we will mainly tackle the former two stages, which envisage your students to provide evidence of their prior knowledge and you reviewing and possibly recognizing the related learning outcomes. To allow this, the Open Online Tool allows your student to submit evidence with respect to one or more Learning Outcomes. Subsequently, you as the teacher - in the case of a positive assessment of this evidence - may decide to totally or partially recognize the achievement of their Learning Outcomes. This can help you better understand your students' prior knowledge and actual needs, thus supporting you to create personalized paths for them.

To learn more about Personalization, see topic 6.

If you wish to deepen your understanding of validation of prior (non-formal/informal) learning in relation to the competences of FCNs European Curriculum see:

 The <u>Guidelines supporting the design of local curricula in D3.2.1</u>, that presents possible directions to support validation of prior learning in FCN training.

To provide you with practical suggestions, in the following we drew some scenarios regarding the abovementioned points.

¹ "Non-formal learning is not provided by an education or training institution and typically does not lead to certification; however, non-formal learning is intentional on the part of the learner and has structured objectives, learning time and learner support" [ECVET Glossary]

² "Informal learning results from daily activities related to work, family life or leisure, it is not structured and most often does not lead to certification; in most cases, informal learning is unintentional on the part of the learner" [ECVET Glossary]

10.1 SCENARIO 7A – Viewing your students' Learning Plan(s)

In order to support you and your students towards validation of prior (non-formal/informal) learning, the Open Online Tool is featured with a specific functionality, i.e. the Leaning Plan. Generally speaking, a Learning Plan is a list of Learning Outcomes. In the context of the ENhANCE project, under the national pilot courses, the Learning Plan is composed of the Learning Outcomes of the related national curricula (see Figure 5).

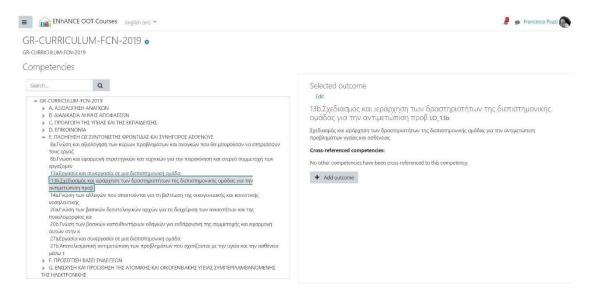


Figure 5 – The list of the Greek Learning Outcomes in the OOT Learning Plan

The aim of the Learning Plan is to allow your students to submit evidence of their (prior) non-formal / informal learning and link them with (some of) the Learning Outcomes of your course. This way you can consider the evidence and - in case - recognize your students have already reached some Learning Outcomes. As a consequence, for instance, you can decide your students can skip some of the proposed activities. When your student submits evidence of prior learning, you can review and rate it.

When you are logged into your course on the OOT, you can view your students' profiles (e.g. from the list of participants), as well as the Learning Plan(s) assigned to each student and the evidence(s) of their prior learning.

To learn how to do it on the OOT, follow the following link:

Recognition of prior learning on the OOT (P12)

10.2 SCENARIO 7B – Reviewing your students' Learning Outcomes

When you are in your course on the OOT, you can view if any evidence of prior learning has been submitted and then you can start reviewing the related Learning Outcomes, rating each student.

Of course, it is recommendable that if you evaluate the evidence positively, this has impacts on the student's learning path. For example, you can consider personalizing their learning path (see <u>topic 6</u>) and /or allow them to skip some of the proposed learning activities and /or consider this during the final exam.

To learn how to do it on the OOT, please follow the following link:

Recognition of prior learning on the OOT (P12)

12. T8 - How can I support non only formal, but also non-formal and informal learning?

When you are teaching the course, you and your students are mostly engaged in what is called *formal learning*; namely a situation that was conceived and structured specifically for learning, with established goals and objectives, that usually happens in (or is organized by) a training institution, in a structured way, often with the issue of an official certificate.

Nevertheless, learning may also happen outside the formal learning environment, in other daily-life situations. Here we talk of 'non formal' and 'informal' learning.

According to ECVET Glossary: "Non-formal learning is not provided by an education or training institution and typically does not lead to certification; however, non-formal learning is intentional on the part of the learner and has structured objectives, learning time and learner support". On the other hand, "Informal learning results from daily activities related to work, family life or leisure, it is not structured and most often does not lead to certification; in most cases, informal learning is unintentional on the part of the learner."

If you want to deepen the discourse of formal / non-formal / informal learning in relation to the competences of FCNs European Curriculum see:

• The <u>Guidelines supporting the design of local curricula in D3.2.1</u>, that presents possible future directions to support formal / non-formal / informal learning in FCN training.

Within focus on your FCN students, you should keep in mind that:

- To value non-formal and informal learning within your module/teaching, you should consider promoting students' submission of evidence of their prior (non-formal and informal) learning (see topic 7).
- To promote the practice of both non-formal and informal learning among your students, which may hopefully lead to the construction of a professional community (not only outside your module/teaching, but even outside the formal learning environment) fostering professional development and sharing professional experiences, you should consider inviting your students to "attend" the informal spaces of the Web which can be used for non-formal/informal learning, with a view on professional development.

To provide you with practical suggestions, in the following we drew some scenarios regarding especially the last of the abovementioned points.

11.1 SCENARIO 8A – Encouraging non-formal and informal learning

To help your students move from a formal learning environment (your course) to a non-formal/informal one, you can guide them to access non-formal/informal communities on the web.

With regard to FCNs, a virtual space has been created, called the **ENhANCE OOT Community**, where your students can interact and connect with other people involved in the same professional field, and where they can share information within multiple unstructured, self-directed knowledge contexts (web-based fora, such as discussion groups, e-portfolios, etc.)³.

To make the most of this online community, you can, for example, ask your students to populate the OOT Community by sharing contents that have been explored or developed within your module/teaching. So, for example, if there has been an interesting discussion on your Forum, you can suggest that they transfer and launch a similar discussion also on the OOT Community, to collect other colleagues' opinions. Similarly, if you detect they have produced a good output as a result of one of the (individual or collaborative) activities that you have proposed during your module/teaching or they have shared an interesting resource in the Database of your module/teaching, you can suggest that they share it on the OOT Community as well.

All these contents can be easily exported from Moodle to the OOT Community:

OOT Community (general) (P13)

Another possibility to promote non-formal / informal learning is to ask your students to create or join groups on the OOT Community. Of course, you will be free to create or join groups on the OOT Community, but remember that in this context your role is no longer that of the teacher, you can be a simple member of a group or the leading expert of a group created by you. Moreover, you can invite other experts to your group to discuss with your students.

Take a look at the functionalities of the OOT Community:

OOT Community Portfolio (P11)

³ Note that the OOT Community is an open platform, not only for participants to the ENhANCE pilot courses, but also to people from outside the project.

13. T9 - How can I promote self-regulated learning and continuous professional development of FCNs?

Self-regulated Learning (SRL) has been defined as the process through which an individual actively and consciously controls his/her own learning in terms of cognition, motivation and affect, and behaviour (Zimmerman, 1998; Pintrich, 1995; Persico & Steffens, 2017).

Arguably the most well-known model of SRL is Zimmerman's model and it concerns how SRL takes place in in academic contexts, i.e. in formal learning. This model sees SRL as a cyclic process entailing three phases: forethought, performance and self-reflection.

However, SRL takes place in informal learning contexts too. Professional learning, in fact, increasingly relies on the individuals' control of their own learning, up to the point that – besides making decisions about how and when to learn - they decide in full autonomy what they want to learn. Some authors, in this case, prefer to use the term "Self-Directed Learning (SDL)" (Pilling-Cormick & Garrison, 2007).

In informal contexts, learning often intertwines with work, as people develop their competence through practice in real contexts. Professional development in the workplace is radically different from learning in academic contexts, and so is SRL. Regardless of whether they use the term SRL or SDL (the distinction between the two is still quite blurred in scientific literature), studies of how SRL takes place in professional learning communities acknowledge the fact that the process is mostly based on practice sharing and make heavy use of today's technology (Dabbagh & Kitsantas, 2012).

The 4Cs framework (Milligan, Littlejohn & Margaryan, 2014; Littlejohn, Mlligan & Margaryan, 2012), for example, distinguishes between 4 different types of behaviours which take place when the individual participates in professional learning networks: these are called "Consume", "Create", "Connect" and "Contribute" behaviours.

If you want to learn more about SRL and the 4Cs framework, in the ENhANCE Open Contents Repository you can find:

- Slides
 - ENhANCE Teacher training M4 Basics of self-regulated learning and gamification.
- Two articles:

- o Workplace Learning in Informal Networks (Milligan et al., 2014).
- Auto-regolazione nell'apprendimento online (Persico, 2016)

For further readings

Dabbagh, N., & Kitsantas, A. (2012). Personal learning environments, social media, and selfregulated learning: A natural formula for connecting formal and informal learning. *International Journal on E-Learning, 3*(1), 40–47.

Littlejohn, A., Milligan, C., & Margaryan, A. (2012). Charting collective knowledge: Supporting self-regulated learning in the workplace. Journal of Workplace Learning, 24(3), 226–238.

Milligan, C., Littlejohn, A., & Margaryan, A. (2014). Workplace learning in informal networks. Journal of Interactive Media in Education, (1). http://www-jime.open.ac.uk/jime/article/view/2014-06

Persico, D., & Steffens, K. (2017). Self-regulated learning in technology enhanced learning environments. In Technology Enhanced Learning (pp. 115-126). Springer, Cham.

Pilling-Cormick, J., & Garrison, D. R. (2007). Self-directed and self-regulated learning: Conceptual links. Canadian Journal of University Continuing Education, 33(2), 13.

Pintrich, P. R. (1995). Understanding self-regulated learning. New directions for teaching and learning, 1995(63), 3-12.

Zimmerman, B. J. (1998). Models of self-regulated learning and academic achievement. In B. J. Zimmerman & D. H. Schunk (Eds.), Self-regulated learning and academic achievement. Theory, research and practice (pp. 1–25). New York: Springer.

13.1 Scenario 9A - 4C Framework

In the 4Cs framework, Consume behaviours are those that entail making use of knowledge and resources created by others, Create behaviours have to do with producing new knowledge or distilling and organising existing one, Connect behaviours have to do with linking with others and/or providing feedback on their work, and Contribute behaviours occur when new knowledge is made available to others.

To promote your FCN students' ability to self-regulate within your module/teaching and beyond it, you should therefore propose to them authentic learning tasks and scaffold them by using collaborative techniques. See T3 "How can I support collaboration among FCNs in my online/blended course?" for more details about collaborative techniques) to encourage them to practice the above four types of behaviours.

In the ENhANCE, we have also resorted to gamification strategies: See <u>T10 "How</u> <u>can I support my students' motivation and engagement?"</u>) to foster the use of these

behaviours in a balanced manner. This is done through the individual participants' and *Nurse Sally's* 4Cs Dashboards. Both of these Dashboards are available on each user's course homepage (right side of the screen) and are visualized as 'bags'. The metaphor of the nurse's bag has been used to represent the extent to which each participant and the whole student cohort (represented by Nurse Sally) have practiced the 4Cs. In other words, each time a user enacts one behaviour in the OOT (for example each time a user sends a post to a Forum, which corresponds to a "connect" behaviour, or access a learning material, which corresponds to a "consume" behaviour), this is automatically tracked by the system and is visualized in both the individual Dashboard, as well as in the Nurse Sally's (=community)'s Dashboard.

This way you and your students will be able to continuously monitor your own performance (in respect to the 4Cs) and compare it to that of the others (for more information see scenario 10A – Gamification with Nurse Sally).

In order to know more about how the 4Cs Dashboard works and how to correctly configure it for your module/teaching, see:

• 4Cs Dashboard (P14).

Consider that meta-reflection is also an important component of self-regulated learning and this is also fostered through the Meta-Reflection Forum and the Journal, as it is presented in the <u>scenario 1C Promoting students' meta-reflection throughout</u> the course. Thus the OOT supports meta-reflection with two functionalities:

- Forum (P3) (for group meta-reflection)
- <u>Journal (P4)</u> (for individual meta-reflection).

14. T10 - How can I support my students' motivation and engagement?

Motivating and engaging students is important especially in online or blended learning courses, where relationships with the teacher, colleagues and contents are mediated by technology, and are experienced as less 'direct' than in face-to-face contexts.

Gamification, that is the application of game elements in non-gaming contexts (Deterding, Sicart, Nacke, O'Hara, & Dixon, 2011), is recognized as able to affect these two abovementioned aspects even though it cannot be considered a sort of panacea.

If you want to learn more about gamification, on the ENhANCE Open Contents Repository you can find:

- Slides:
 - ENhANCE Teacher training M4 Basics of self-regulated learning and gamification.

To provide you with practical suggestions on how to implement gamification in your course, we have drafted two scenarios.

For further readings

Deterding, S., Dixon, D., Nacke, L.E., O'Hara, K., Sicart, M. (2011). Gamification: Using Game Design Elements in Non-Gaming Contexts. In Proceedings of the 2011 Annual Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA'11), Vancouver, BC, Canada. 2425-2428. doi: 10.1145/1979482.1979575.

14.1 Scenario 10A – Gamification with Nurse Sally

Gamification elements can be used to support students' achievement of cross-sectional objectives of the course, such as developing students' ability to collaborate and to self-regulate their learning process, as well as their continuous professional development capacities (see also T3 "How can I support collaboration among FCNs in my online/blended course? and T9 "How can I promote self-regulated learning and continuous professional development of FCNs?").

In order to support students' motivation and engagement to practice 'positive' behaviours in terms of self-regulated learning, in the ENhANCE course we have created *Nurse Sally*. *Nurse Sally* is a gamification element; it is a virtual character that will act in the course to trigger self-regulated learning behaviours, by helping learners to monitor and understand the process they are involved in.

Nurse Sally will act as a sort of external, virtual tutor, who will appear in the Meta-Reflection Forum (available on the course homepage, at the top of the page) by introducing herself at the beginning of the course. She will also introduce the 4Cs metaphor (see also T9 "How can I promote self-regulated learning and continuous professional development of FCNs?"), which proposes 4 behaviours (namely Create, Consume, Connect, Contribute) as good ones to be followed in the course to help develop your students' own self-regulated learning abilities.

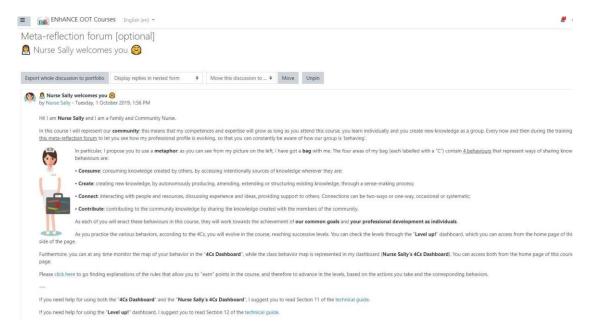


Figure 6 – Nurse Sally's initial message in the Meta-Reflection Forum

During the course, every now and then, *Nurse Sally* will prompt your students to reflect on what is happening in the community in a fun and effective way. Moreover, *Nurse Sally's* bag (see icon on the right side of the course homepage) will show the community's performance in terms of the 4Cs (Figures 6 and 7).

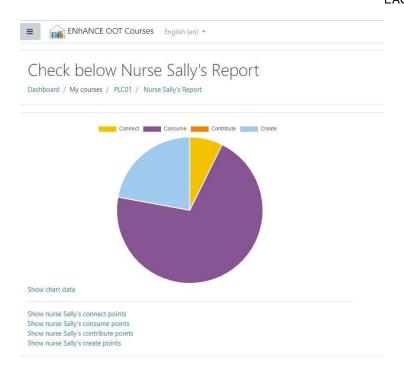


Figure 7 - Nurse Sally's bag in the Greek pilot course

As a teacher of the ENhANCE course, you do not need to take any particular action about this. *Nurse Sally* will be 'enacted' by the project staff; you just need to be aware of her 'presence' and – possibly – you should adequately configure the 4Cs Dashboard depending on the activities you are going to propose in your course.

If you want to learn more about the 4Cs Dashboard and how to correctly configure it, follow the link:

4Cs Dashboard (P14)

14.2 Scenario 10B – Gamification with points and badges

Gamification elements can be used to engage students in the achievement of content-related learning objectives.

This can be done by giving them feedback about their performances in the course, by using points, badges and leader board. Of course feedback on the students' performance in a course can be given in several ways and about different aspects. For example, it could be informative for the student knowing his/her progression in the course at individual level (or compared with the other students) or being informed about the results achieved.

In order to make the feedback 'lighter' and trigger a bit of competition in the learners' community, this can be presented in the form of points gained, a leader board

comparing the individual performance with the other students' performance and/or badges, acknowledging the achievements in the different parts/modules.

The OOT is endowed with a couple of features allowing to introduce simple gamification elements (e.g. points for participation in activities, leader board, badges, etc, i.e.:

- Level up! (P15)
- Badges (P16).

These have been already configured in the ENhANCE course, but of course you might decide to change the standard configuration, to align awards to your activities. In the above mentioned video-tutorials, you will find instructions about how to do it.

Moreover, you can decide to open specific contents only once the student has achieved specific goals. In addition, this progression can be accomplished by introducing 'levels' in the course, that is a common mechanic in games.

15. T11 - How can I create Open Contents for my FCN training?

The notion of "Open Content" describes a creative work that others can copy or modify freely, without asking for permission. Usually, such kind of content is released by the author under a "Creative Common" (CC) license. Translating the concept of open content into education, we can more properly speak of "Open Educational Resources" (OERs). OERs can be defined as teaching, learning, and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use and/or re-purposing by others.

If you want to have more detailed information about free open contents and their use in the context of the ENhANCE project, see:

- The Annex to <u>D4.2.1</u>, that presents the release notes of the "Free Open Contents Targeting VET teachers and trainers". This document presents a brief description of the notion of "Open Contents", the CC licenses, and the concepts of OERs and Open Access (OA).
- Slide webinar M5.

During your FCN teaching activity, you will need to prepare teaching materials for your students, and/ or re-use materials created by others. You must therefore be aware of the licenses for the use of these materials, especially if they are copyrighted materials. Are you sure you can reuse them? How? With what limitations? In addition, you can ask the students themselves to produce learning materials, individually or as a group, and these outputs could become learning materials for future students in other FCN courses (so Open Contents in themselves). All these materials produced by you or by your students could be organized and collected in a digital archive, freely and openly accessible, which would facilitate sharing.

To provide you with practical suggestions, in the following we drew some scenarios regarding the abovementioned points.

14.3 SCENARIO 11A – Creating Open Educational Resources

Open Educational Resources (OER) include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge.

When creating an OER for your lesson, you will first need to define the type of file/format for your learning object. This can vary from a minimum level of granularity to a maximum one. It could be a raw content (such a text document, an image, a

video file or an audio file). It could be a more structured learning material, such as slide and class presentation, an audio podcast, an open textbook (or a chapter from textbook), an e-book, a video lecture/tutorial, an interactive game or simulation, an infographic. It could be an assessment material (such as a quiz or an assignment). Finally, it could be a whole course, or elements of an existing course.

After that, you will choose the right tool for creating your OER. For instance, for creating slides and class presentations, you will be using a presentation program such as Microsoft PowerPoint (Microsoft Windows), Keynote (Apple OS X), Impress (OpenOffice), or Google Slides.

To make sure that your learning object is "Open Content", you will need to apply a Creative Commons license to it. You can choose the one more suitable for your needs (https://creativecommons.org/choose/).

The OOT has been featured with specific functionalities aimed at supporting you in creating an Open Content for your course, or in uploading a previously created one

OER creation (P17a)

14.4 SCENARIO 11B – Sharing Open Educational Resources

The power of Open Educational Resources (OER) also lies in the fact that they can be shared. There are several OERs Repositories where you can find (also) educational contenst for Nursing. In particular, you can take a look at MERLOT, the Multimedia Educational Resource for Learning and Online Teaching. Other OERs repositories where you can find content or topics related to the field of nursing are: Khan Academy, University of Michigan - School of Nursing, George Washington University - School of Nursing, Open Resources for nurse educators serving low-income countries,

The OOT has been featured with specific functionalities aimed at supporting you in sharing your Open Contents. More specifically, the Open Repository - namely "OPEN CONTENTS - SHARED DATABASE" - is available at the following URL: https://oot.enhance-fcn.eu/mod/data/view.php?id=308 (no registration required). To learn how to upload an Open Content on the Repository, click the following link

Adding Open Contents (P17b)

After the end of the project, the Open Contents produced will be available for free to be used by FCNs and VET teachers and trainers, for self-learning or reuse in other courses.

16. Towards the delivery of the pilot courses

In an attempt to support teachers in the final phases of design and preparation of their modules/teachings, we provide here a final checklist. The checklist is divided into two parts: the first part is for pilot coordinators only (as it addresses logistical aspects that the pilot coordinator needs to be aware and in charge of), while the second part is for teachers and addresses aspects related to the delivery of the single teachings/modules.

Going through the questions pilot coordinators and teachers will have the opportunity to check whether all the relevant aspects in terms of design and preparation of courses have been duly taken into account. If this is not the case, they should come back to the related sections (Topics or Scenarios) of these Guidelines.

Of course, in case a pilot coordinator also acts as a teacher in the pilot, s/he will need to go through both the checklists.

15.1 Checklist for pilot coordinators

- Have you checked that all your teachers have duly taken into account the learning outcomes of your national curriculum, as they are described in <u>D3.3</u> <u>"Instructional Design documents of three national curricula and pilot courses"?</u>
- Have you checked that they have adequately designed their modules/teachings and that all the pertinent LOs are covered?
- Have you checked that you teachers have adequately designed their assessment according to <u>D3.2.1 "Guidelines supporting the design of local</u> <u>curricula – first release"</u> and <u>D3.3 "Instructional Design documents of three</u> national curricula and pilot courses"?
- Have you taken contacts for offering work-based learning to your students?
- Have you checked that the Open Online Tool has been completely and correctly configured for your pilot course?
- Have you checked that all the students and teachers have (been) registered to the Open Online Tool?
- Have you organized at least one launch event for your course (either face-toface or online)?
- Have you envisaged a socialization phase/activity at the very beginning of the course in order to promote students' familiarization among themselves and with the Open Online Tool?

- Have you checked that <u>at least one online collaborative activity for each</u>
 <u>MODULE</u> will be implemented in your pilot?
- Have you checked that <u>at least one online case study for each MODULE</u> will be implemented in your pilot?

15.2 Checklist for teachers

- Have you checked that your module/teaching is adequately framed within the ENhANCE national curriculum as it is described in <u>D3.3 "Instructional Design</u> <u>documents of three national curricula and pilot courses"</u> and that the students' learning outcomes you will tackle in your module/teaching reflect the ones proposed by the project?
- Have you developed an evaluation grid for your module/teaching where you specify the evaluation criteria and methods, according to <u>D3.3 "Instructional</u> <u>Design documents of three national curricula and pilot courses"</u>?
- Have you envisaged at least one online learning activity within your module/teaching?
- Have you envisaged at least one collaborative learning activity within your module/teaching?
- Have you envisaged at least one online case study within your module/teaching?
- In the design of your collaborative learning activity, have you taken due account of the 4 main components, i.e. Task, Team, Time, Technology?
- In the design of your module/teaching, have you included activities able to foster the 4 'self-regulated learning' behaviours, i.e. Consume, Create, Connect, Contribute?
- In the design of your module/teaching, have you included any gamification mechanic to foster students' engagement?
- While preparing the teaching/learning materials (contents) for your module/teaching (slides, lecture notes, videos, quiz, ...) have you defined a CC licence and put it on each piece of document?
- Have you shared your teaching/learning materials (contents) on the ENhANCE Open Contents Repository?
- In the design of your module/teaching have you envisaged to support students' networking even outside the formal context of the course?

- In the design of your module/teaching have you envisaged to offer your students different options (e.g. types of learning materials, or activities, etc.), to support a personalised learning path?
- In the design of your module/teaching have you envisaged to recognize your students' prior (formal or non-formal) learning?

17. Discussion & Conclusions

In this deliverable we have drafted the Guidelines supporting teachers to design effective learning activities starting from the localized FCN curricula. To do this, we have ensured all the relevant and innovative aspects addressed in the ENhANCE project have been covered (practice sharing, case studies, validation of prior learning, etc.) and used an approach that provides very practical suggestions to teachers on how to make the most of the project outcomes, both from the methodological and the technological point of view.

As already mentioned at the beginning of this document, despite the fact that in the proposal this deliverable was due in the form of a paper document, we have chosen to produce also a digital version of it. Thus we have created a hyper textual and hyper medial version of these Guidelines and are going to offer them (starting from October, 15th, 2019) to teachers of the project as a "Follow up" of the teacher training delivered last Spring and Summer (the Follow up will always be available from the Open Online Tool). This will ensure that both teachers who attended the training, but also those who were not in the position to attend, can review and absorb all the most relevant contents and innovations proposed by the project and find all the links with detailed instructions on how to concretely implement them in their pilots, thus exhaustively exploiting the project outcomes.

After the pilots, and through the feedback collected from the teachers after using these Guidelines, a second version will be issued. The main aim of the second version (due at M35) will be to generalise the Guidelines: in this first version they have been intended mainly as a tool for teachers of the project, In the second and final version, the idea is to create a more general, stand-alone document (as well as digital version, which is in any case more usable and sustainable over time) targeting teachers who were not involved in the project, but future teachers at higher educational institutes who have taken up the ENhANCE project outcomes. These Guidelines, along with the Guidelines for VET providers (D3.2.2) will be among the most important legacies of the project as they allow the transferability and sustainability of the ENhANCE Curriculum beyond the boundaries of this project.