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## Guidelines for teachers

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**Authors:** Flavio Manganello (CNR-ITD), Francesca Pozzi (CNR-ITD), Marcello Passarelli (CNR-ITD), Andrea Ceregini (CNR-ITD), Francesca Dagnino (CNR-ITD), Donatella Persico (CNR-ITD), Marta Romagnoli (CNR-ITD)



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## 1 Welcome!

These guidelines have been developed in the context of the [ENhANCE project](#), funded by the Erasmus+ Programme, and aim at **supporting teachers to design innovative online teaching and learning activities in the field of family and community nursing education**.

More specifically, they contain indications and methodological recommendations for teachers on how to use and customize the technological tools proposed by the project, as well as how to identify the most adequate teaching and learning methods for the delivery of the activities.

In the project the Guidelines have been conceived as a package to be used along with the "[Guidelines supporting the design of local curricula](#)" (D3.2,2), so to drive the design of an entire course from the "[European Curriculum for Family and Community Nurses](#)" (D.3.1.2), down to the localized curriculum and then to the specific teachings of the course. In this sense, these Guidelines represent the final step of the design (micro-design level), for teachers to plan, deliver and evaluate innovative online learning activities.

Note that in these Guidelines we will often refer to the [Open Online Tool \(OOT\)](#), an e-learning platform that has been developed in the project and equipped with specific functionalities aimed to support family and community nursing education. **The OOT is free and open and any teacher can consider taking it up**. In any case, given that it is based on Moodle, many of the indications contained in these Guidelines are valid if you are using Moodle or other similar Learning Management Systems.

Even if conceived in the project framework, the Guidelines have been **generalized to support the design of innovative online nursing education in any contexts**; so they are also an independent toolkit that can be a reference for any teacher willing to improve online learning provision in online nursing education.

## 2 Introduction

These Guidelines contain a set of practical instructions to support teachers in the **design and delivery of innovative online teaching and learning activities in the field of Family and Community Nursing (FCN) education.**

At the micro-design level, we expect you will need to take decisions regarding a number of aspects: some of them will directly derive from the macro-design level (i.e., curriculum level), others will be more specific and guided by the peculiarities of the knowledge domain concerned. In particular, these decisions might regard several **topics**.

Topics are independent from one another, so you can choose to start from any of them and none of them is mandatory.

Within each topic, you will find some introductory theoretical explanations about the concept(s) addressed. Moreover, you will find a number of **scenarios**, containing suggestions on how to practically implement the theory into your own teaching/module.

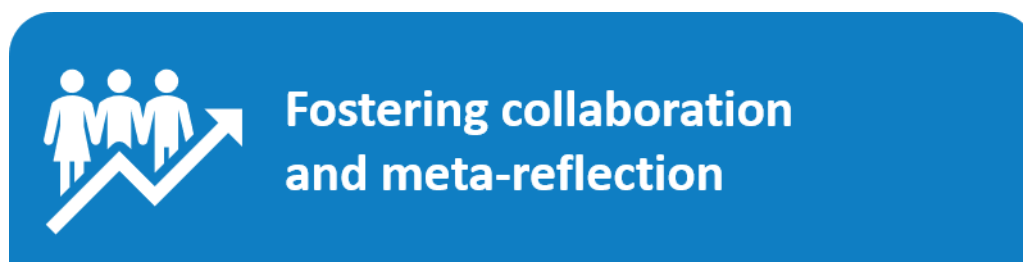
In each scenario, you will also find **video-tutorials** explaining the technical functionalities of the Open Online Tool (a specific e-learning platform created for Family and Community nursing training). Note that the Open Online Tool is free and open and you can choose to take it up in your course. In any case, the tool is based on Moodle, so many of the functionalities proposed in these guidelines will work even if you are using Moodle or other similar Learning Management Systems.

### 3 Topics

For the purpose of these guidelines, we have identified **eleven topics** as it follows:

1. [What are the main features of an online course fostering collaboration and meta-reflection?](#)
2. [How can I support online communication?](#)
3. [How can I support collaboration among Family and Community Nurses \(FCNs\) in my online course?](#)
4. [How can I support practice sharing among FCNs in my online course?](#)
5. [How can I design an effective student assessment in my online course?](#)
6. [How can I facilitate personalization for my students?](#)
7. [How can 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?](#)
8. [How can I support non only formal, but also non-formal and informal learning?](#)
9. [How can I promote self-regulated learning and FCNs' continuous professional development?](#)
10. [How can I support my students' motivation and engagement?](#)
11. [How can I create Open Contents for my FCN training?](#)

### 3.1 What are the main features of an online course fostering collaboration and meta-reflection?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-2>

Within the Technology Enhanced Learning research field, many researchers have pointed out the **importance of an accurate design process** when a teacher proposes online learning activities, especially if s/he wants to foster collaboration and self-regulated learning. Particularly, 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 [1] [2].

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

Three different scenarios are proposed for this topic, as presented in Table 1:

Scenario:	1A
Title:	Providing students with orientation materials
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1839">https://oot.enhance-fcn.eu/mod/page/view.php?id=1839</a>
Scenario:	1B
Title:	Fostering students' socialization
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1840">https://oot.enhance-fcn.eu/mod/page/view.php?id=1840</a>
Scenario:	1C
Title:	Promoting students' meta-reflection
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1841">https://oot.enhance-fcn.eu/mod/page/view.php?id=1841</a>

Table 1 - Scenarios for Topic 1

#### 3.1.1 Scenario 1A - Providing students with orientation materials

Providing students with orientation materials it is very important in online learning settings. 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.

**COURSE GUIDE/SYLLABUS.** It is recommended that teachers prepare and upload on the digital environment a Course Guide/Syllabus, 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 online courses, but will be used also later on, as a reference document for the whole duration of the course by students. Here you can find an example of a Course Guide. As you can see, 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.

**PLATFORM USER MANUAL.** Especially in online settings, students will need to be provided with a User Manual that describes the learning environment (i.e., the online platform) they are going to use. Here you can find an example of a User Manual. 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.

**FILE UPLOAD.** In online settings, you may want to upload these orientation materials (course syllabus, user manual, or any other relevant documentation) on the e-learning platform for ease of access by your students.

### 3.1.2 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 (e.g., 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 T10 "How can I support my students' motivation and engagement?" for further suggestions about this).

**FORUM.** These types of socialization activities are usually carried out via asynchronous communication tools, for example in Forums.

**WEBINAR.** Of course, you can also consider launching your course, as well as the socialization activity, during a synchronous event (e.g., a webinar).

**COMMUNITY.** 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 students to join existing groups or communities already active on the social media, or to use the specific OOT functionality, called OOT Community. Watch the following video to learn how it works.

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If you want to learn more about how to support informal networking among your students, please see: [T8 “How can I support non only formal, but also non-formal and informal learning?”](#).

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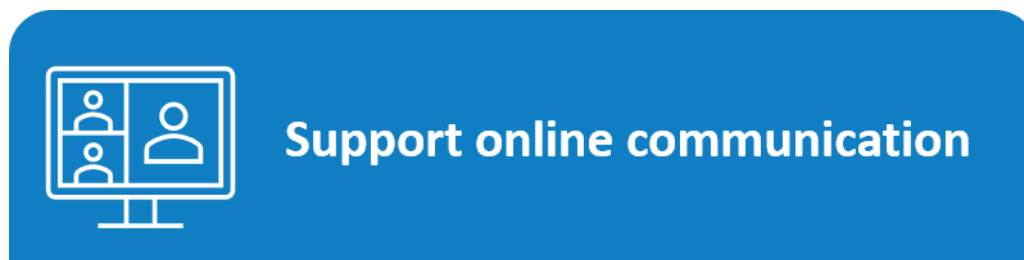
### 3.1.3 Scenario 1C - Promoting students’ meta-reflection

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: T9 “[How can I promote self-regulated learning and continuous professional development of FCNs?](#)”.

**FORUM.** You can create a digital space (i.e., the “Meta-reflection Forum”) where students will be triggered to reflect on the learning process. In this virtual space, you might want to introduce a fictional character (for example, a “Nurse Sally” or a “Florence Nightingale”), a sort of virtual tutor - which will be of course acted by a human tutor - in charge of the meta-reflection aspects, who will show up every now and then in this forum to prompt meta-reflection and engage students in discussions about their own and the group learning process.

**JOURNAL.** Moreover, at a certain point during the course, you might 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.

### 3.2 How can I support online communication?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-3>

In online learning, the technology mediates communication between all the actors involved in the learning process. Thus, 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 [3] [4]. 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 socio-constructivist 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 the one or the other. The following two scenarios will support your choices.

Two different scenarios are proposed for this topic, as presented in Table 2:

Scenario:	2A
Title:	Synchronous communication
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1842">https://oot.enhance-fcn.eu/mod/page/view.php?id=1842</a>

Scenario:	2B
Title:	Asynchronous communication
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1843">https://oot.enhance-fcn.eu/mod/page/view.php?id=1843</a>

Table 2 - Scenarios for Topic 2

### 3.2.1 Scenario 2A - Synchronous communication

In online learning settings, synchronous communication sessions, like for example webinars, lend themselves particularly well to present extensive content to a (potentially large) audience.

**WEBINARS.** 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.

**BREAKOUT ROOMS.** In online webinars, you can also create breakout rooms as an additional means of student engagement; use breakout rooms to encourage small group discussion, collaboration, and cooperation amongst students.

### 3.2.2 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 online courses is important because Family and Community Nurses 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.

Note that when asynchronous communication is used in the context of online collaborative activities, this needs to be supported by a tutor, a person in charge of launching the activities, monitoring the collaborative process, triggering the discussion and in general helping groups to converge towards the objectives.

**FORUM.** This is a specific functionality of online learning environments aimed to support asynchronous communication:

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If you want to learn more about how to support collaboration among Family and Community Nurses (FCNs), you can follow the link T3 "[How can I support collaboration among FCNs in my online course?](#)"

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If you want to learn more about how to support practice sharing among Family and Community Nurses (FCNs), you can follow the link T4 "[How can I support practice sharing among FCNs in my online course?](#)"

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### 3.3 How can I support collaboration among FCNs in my online course?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-4>

“Simply put, collaboration entails working together toward a common goal”. Based on this simple definition, [5] 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 [6], 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 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 [7]. 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 Scenario 3D – Pyramid), and Debate (see Scenario 3E – Debate).

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 [8].

In the following scenarios you can find the description of a number of collaborative techniques, as well as indications on how to design them. Note that - in any case - online collaborative activities need to be launched and monitored, by an online tutor, a person who is in charge of triggering the discussion, facilitate the communication and in general help the groups to achieve the objectives.

In the following scenarios you can find the description of a number of collaborative techniques, as well as indications on how to design them. Five different scenarios are proposed for this topic, as presented in Table 3:

Scenario:	3A
Title:	Peer Review
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1844">https://oot.enhance-fcn.eu/mod/page/view.php?id=1844</a>
Scenario:	3B
Title:	Jigsaw
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1845">https://oot.enhance-fcn.eu/mod/page/view.php?id=1845</a>
Scenario:	3C
Title:	Role Play
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1846">https://oot.enhance-fcn.eu/mod/page/view.php?id=1846</a>
Scenario:	3D
Title:	Pyramid
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1847">https://oot.enhance-fcn.eu/mod/page/view.php?id=1847</a>
Scenario:	3E
Title:	Debate
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1848">https://oot.enhance-fcn.eu/mod/page/view.php?id=1848</a>

Table 3 - Scenarios for Topic 3

### 3.3.1 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 to run a f2f workshop [21] on manuscript writing and in an online environment [22].

TIME	3 phases		
	Phase 1	Phase 2	Phase 3
<b>TASK</b>	Artefact production	Artefact analysis and feedback production	Revision of original artefact based on feedback
<b>TEAM</b>	Individual work, dyads or small groups	Individual work, dyads or small groups	Same teams as phase 1
<b>TECHNOLOGY</b>	Text editor or other productivity tool	Text editor or other productivity tool	Text editor or other productivity tool

**FORUM.** Use an online forum if you want the discussion among students to happen in asynchronous mode.



**WEBINAR.** Use an online webinar (basic configuration) and/or an online webinar with breakout rooms if you want the discussion among students to happen in synchronous mode.

**DATABASE.** Use the database if you want your students to share their final artefacts.

### 3.3.2 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 groups”.

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, [22] 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 [23] 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

<b>TEAM</b>	Expert groups (e.g., 4 small groups of 4)	Jigsaw groups (e.g., 4 groups containing one member for each expert group)
<b>TECHNOLOGY</b>	f2f or forum	f2f or forum

**FORUM.** Use an online forum if you want the discussion among students to happen in asynchronous mode.

**WEBINAR.** Use an online webinar (basic configuration) and/or an online webinar with breakout rooms if you want the discussion among students to happen in synchronous mode.

**DATABASE.** Use the database if you want your students to share their final artefacts.

### 3.3.3 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 [25] 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.

<b>TIME</b>	<b>2 phases</b>	
	<b>Phase 1</b>	<b>Phase 2</b>
<b>TASK</b>	Role uptake and study of material	Negotiation and production of a shared artefact (each member assumes the assigned perspective)

<b>TEAM</b>	Individual work	Small groups
<b>TECHNOLOGY</b>	f2f or forum	f2f or forum

**FORUM.** Use an online forum if you want the discussion among students to happen in asynchronous mode.

**WEBINAR.** Use an online webinar (basic configuration) and/or an online webinar with breakout rooms if you want the discussion among students to happen in synchronous mode.

**DATABASE.** Use the database if you want your students to share their final artefacts.

### 3.3.4 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).

<b>TIME</b>	<b>3 phases</b>		
	<b>Phase 1</b>	<b>Phase 2</b>	<b>Phase 3</b>
<b>TASK</b>	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

<b>TEAM</b>	Individual students	dyads or small groups	Progressively larger groups until whole cohort
<b>TECHNOLOGY</b>	Text editor or other productivity tool	Text editor or other productivity tool	Text editor or other productivity tool

**FORUM.** Use an online forum if you want the discussion among students to happen in asynchronous mode.

**WEBINAR.** Use an online webinar (basic configuration) and/or an online webinar with breakout rooms if you want the discussion among students to happen in synchronous mode.

**DATABASE.** Use the database if you want your students to share their final artefacts.

### 3.3.5 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 [26], 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.

<b>TIME</b>	<b>2 phases</b>
-------------	-----------------

	<b>Phase 1</b>	<b>Phase 2</b>
<b>TASK</b>	Study of material	Collaborative production of an artefact
<b>TEAM</b>	Individual work	Small groups
<b>TECHNOLOGY</b>	Web or other (digital) resource	Forum

**FORUM.** Use an online forum if you want the discussion among students to happen in asynchronous mode.

**WEBINAR.** Use an online webinar (basic configuration) and/or an online webinar with breakout rooms if you want the discussion among students to happen in synchronous mode.

**DATABASE.** Use the database if you want your students to share their final artefacts.

### 3.4 How can I support practice sharing among FCNs in my online course?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-5>

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 problem-solving 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. Family and Community Nurses (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" [9] 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.

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. Some authors [10] 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.

One scenario is proposed for this topic, as presented in Table 4:

Scenario:	4A
Title:	Case Study
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1849">https://oot.enhance-fcn.eu/mod/page/view.php?id=1849</a>

Table 4 - Scenarios for Topic 4

### 3.4.1 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" [26] [27], 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 [28].

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 T3 "[How can I support collaboration among FCNs in my online course?](#)" for more details about collaborative techniques).

For example, the Debate technique (see scenario 3E "[Debate](#)") 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 scenario 3A "[Peer Review](#)") 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 scenario 3C "[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 scenario 3B "[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 might happen in synchronous or asynchronous mode.

**FORUM.** If you opt for asynchronous communication, you will need a forum.

**WEBINAR.** If you opt for asynchronous communication, you will need a webinar. Watch the following videos to learn how to set up a webinar or a webinar with breakout rooms.



### 3.5 How can I design an effective student assessment in my online course?



#### Design an effective student assessment

URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-6>

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.

Here, we do not intend to tackle the discourse about assessment from a theoretical viewpoint, our purpose is to provide practical suggestions related to online learning assessment.

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 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 (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.

In the following four scenarios (see Table 5), you can find practical suggestions about how to design assessment in your course.

Scenario:	5A
Title:	Teacher assessing knowledge
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1850">https://oot.enhance-fcn.eu/mod/page/view.php?id=1850</a>
Scenario:	5B
Title:	Teacher assessing skills/competences
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1851">https://oot.enhance-fcn.eu/mod/page/view.php?id=1851</a>
Scenario:	5C
Title:	Teacher assessing collaborative activities
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1852">https://oot.enhance-fcn.eu/mod/page/view.php?id=1852</a>
Scenario:	5D
Title:	Peer Assessment
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1853">https://oot.enhance-fcn.eu/mod/page/view.php?id=1853</a>

Table 5 - Scenarios for Topic 5

### 3.5.1 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 for Family and Community Nurses (FCNs) you have tackled a Learning Outcome such as 'Outline, identify and select the proper guidelines, procedures and validated tools for the definition of the outcomes', 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) as an assignment.

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).

**QUIZ.** This functionality allows the teacher to design and build quizzes consisting of a large variety of question types, including multiple choice, true-false, short answer and drag and drop images and text. Watch the following video to learn how to set up a quiz.

**ASSIGNMENT.** The assignment activity provides a space into which students (individually or in group) can submit work for teachers to grade and give feedback on. Watch the following video to learn how to set up an assignment.

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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 course?](#)” and then you go to scenario 5C – [Teacher assessing collaborative activities](#) to know more about how to assess it.

### 3.5.2 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 a specific skill of Family and Community Nurses (FCNs) such as ‘Use standardized and validated tools to evaluate his/her own practice’, 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 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 scenario [4A Case Study](#).

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

**ASSIGNMENT.** The assignment activity provides a space into which students (individually or in group) can submit work for teachers to grade and give feedback on. Watch the following video to learn how to set up an assignment.

### 3.5.3 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).

**REPORT.** This is a specific feature that helps you monitor the individual participation in an online learning platform; 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. Watch the following video, to learn how to use the report functionality.

### 3.5.4 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](#).

**FORUM.** Use an online forum if you want the peer assessment to happen in asynchronous mode. Watch the following video to learn how to set up a forum.

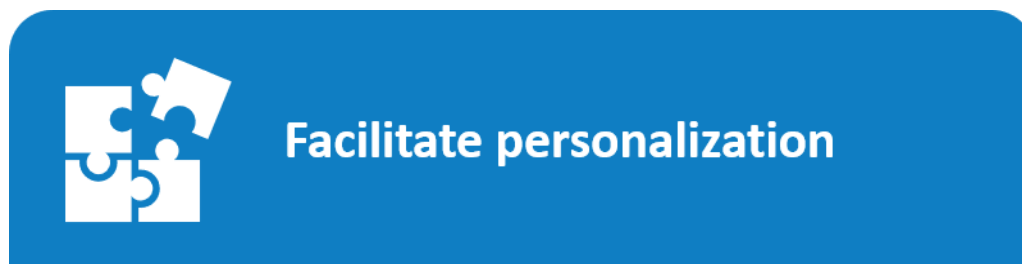
**WEBINAR.** Use an online webinar (basic configuration) and/or an online webinar with breakout rooms if you want the peer assessment s to happen in synchronous mode. Watch the following video to learn how to set up a webinar or a webinar with breakout rooms.

**DATABASE.** Use the database if you want your students to share their final artefacts.

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Note that providing a **rubric** to students aimed to scaffold the reviewing process might help and contribute to collect more structured and effective feedback.

### 3.6 How can I facilitate personalization for my students?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-7>

Personalised learning is a potential approach to meeting educational needs and may provide new alternatives that foster the learning capacity of individual learners [11] [12].

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 [13].

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.

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.

One scenario is proposed for this topic, as presented in Table 6:

Scenario:	6A
Title:	Personalising learning pathways and learning contents
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1854">https://oot.enhance-fcn.eu/mod/page/view.php?id=1854</a>

Table 6 - Scenarios for Topic 6

#### 3.6.1 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.

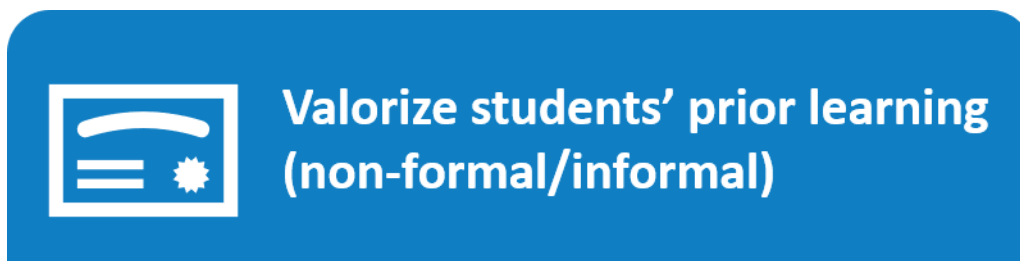
To provide your students with different learning pathways and different learning contents in an online course, you can assign students to one or to several groups. Or you can set up groups, so that students assign themselves. Furthermore, you can restrict access to an entire topic within a course.

**GROUPS.** In an online course, you can use groups if you want to allocate a particular activity, resource or topic section to just one sub-set of students and you don't want the others to access it.

**GROUP CHOICE.** In an online course, you can allow students to freely choose one group and enrol themselves in that group. As a teacher, you can define the groups offered and the maximum number of students allowed in each group. The students can view the members of each group before making a selection, and (if the teacher allows it) can change their selected group until the deadline. More than one group may be chosen if necessary.

**CHOICE.** This functionality allows you to ask a question and set up radio buttons which students can click to make a selection from a number of possible options/ responses. They can choose one or more option and they can update their selection, if you allow it. Choices can be useful when you want your students to choose among different pathways or contents, but of course can be also very useful as quick poll to stimulate thinking, to allow voting, to gauge progress, etc.

### 3.7 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?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-8>

Validation of non-formal/informal learning can be defined as "the process of confirmation by a competent authority that an individual has acquired learning outcomes acquired in non-formal and informal 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 Commission, 2020).

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, some e-learning platforms (such as the OOT) allow 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.)

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

To provide you with practical suggestions, in the following we drew some scenarios regarding the points mentioned above (see Table 7):

Scenario:	7A
Title:	Viewing your students' Learning Plan(s)



URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1855">https://oot.enhance-fcn.eu/mod/page/view.php?id=1855</a>
Scenario:	7B
Title:	Reviewing your students' Learning Outcomes
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1856">https://oot.enhance-fcn.eu/mod/page/view.php?id=1856</a>

Table 7 - Scenarios for Topic 7

### 3.7.1 Scenario 7A – Viewing your students' evidences

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 Learning Plan. Generally speaking, a Learning Plan is a list of Learning Outcomes.

The screenshot shows the ENhANCE OOT Courses interface. At the top, there is a navigation bar with the ENhANCE logo, the text "ENhANCE OOT Courses", and a language dropdown set to "English (en)". Below this, the course title "GR-CURRICULUM-FCN-2019" is displayed. The main content area is titled "Competencies" and features a search bar. A list of competencies is shown, with the following structure:

- GR-CURRICULUM-FCN-2019
  - A. ΑΞΙΟΛΟΓΗΣΗ ΑΝΑΓΚΩΝ
  - B. ΔΙΑΔΙΚΑΣΙΑ ΑΝΗΤΗΣ ΑΠΟΦΑΣΕΩΝ
  - C. ΠΡΟΑΓΩΓΗ ΤΗΣ ΥΓΕΙΑΣ ΚΑΙ ΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
  - D. ΕΠΙΚΟΙΝΩΝΙΑ
  - E. ΠΛΗΘΥΝΣΗ ΟΣ ΣΥΝΤΟΝΙΣΤΗΣ ΦΡΟΝΤΙΔΑΣ ΚΑΙ ΣΥΝΗΓΟΡΟΣ ΑΣΘΕΝΟΥΣ
    - 8a. Γνώση και αξιολόγηση των κύριων προβλημάτων και αναγκών που θα μπορούσαν να επηρεάσουν τους εργαζόμενους
    - 8b. Γνώση και εφαρμογή στρατηγικών και τεχνικών για την παροχή και ενεργό συμμετοχή των εργαζομένων
    - 13a. Εργασία και συνεργασία σε μια διεπιστημονική ομάδα
    - 13b. Σχεδιασμός και ιεράρχηση των δραστηριοτήτων της διεπιστημονικής ομάδας για την αντιμετώπιση προβλημάτων υγείας και ασθένειας
    - 14a. Γνώση των αλλαγών που απαιτούνται για τη βελτίωση της οικογενειακής και κοινωνικής νοσηλευτικής
    - 20a. Γνώση των βασικών δεοντολογικών αρχών για τη διαχείριση των ανισοτήτων και της ποικιλομορφίας
    - 20b. Γνώση των βασικών κατευθυντήριων οδηγιών για ενθάρρυνση της συμμετοχής και εφαρμογή αυτών στην κλινική πράξη
    - 27a. Εργασία και συνεργασία σε μια διεπιστημονική ομάδα
    - 27b. Αποτελεσματική αντιμετώπιση των προβλημάτων που σχετίζονται με την υγεία και την ασθένεια μέσω των εργαζομένων
  - F. ΠΡΟΣΕΤΤΙΣΗ ΒΑΣΕΙ ΕΝΔΕΙΞΕΩΝ
  - G. ΕΝΔΕΙΧΣΗ ΚΑΙ ΠΡΟΣΘΕΣΗ ΤΗΣ ΑΤΟΜΙΚΗΣ ΚΑΙ ΟΙΚΟΓΕΝΕΙΑΚΗΣ ΥΓΕΙΑΣ ΣΥΜΠΕΡΙΛΑΜΒΑΝΟΜΕΝΗΣ ΤΗΣ ΗΛΕΚΤΡΟΝΙΚΗΣ

On the right side, the "Selected outcome" section shows the selected outcome: "13b. Σχεδιασμός και ιεράρχηση των δραστηριοτήτων της διεπιστημονικής ομάδας για την αντιμετώπιση προβλημάτων υγείας και ασθένειας". Below this, it states "Cross-referenced competencies: No other competencies have been cross-referenced to this competency." and includes an "Add outcome" button.

The aim of the Learning Plan is to allow your students to submit evidences 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.

**LEARNING PLANS.** 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.

### **3.7.2 Scenario 7B - Reviewing your students' evidences**

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.

As a consequence of your evaluation, you can consider personalizing the students' learning path (see topic 6) and /or allow them to skip some of the proposed learning activities and /or consider this during the final exam.

**LEARNING PLANS.** 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.

### 3.8 How can I support non only formal, but also non-formal and informal learning?



#### Support formal, non-formal and informal learning

URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-9>

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."

In order to support non-formal/ informal learning, in your course you can:

- value non-formal and informal learning within your module/teaching; to do so, you can consider promoting students' submission of evidences of their prior (non-formal and informal) learning (see topic 7).
- promote the practice of both non-formal and informal learning among your students; this may hopefully lead to the construction of a professional community (not only outside your module/teaching, but even outside the formal learning environment), thus fostering professional development and sharing professional experiences. To do so, you can 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 points mentioned above.

One scenario is proposed for this topic, as presented in Table 8:

Scenario:	8A
Title:	Encouraging non-formal and informal learning
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1857">https://oot.enhance-fcn.eu/mod/page/view.php?id=1857</a>

Table 8 - Scenarios for Topic 8

### 3.8.1 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. There are different groups and communities already available on the different social media.

With regard to Family and Community Nurses (FCNs), a virtual space has been created, called the 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 (discussion groups, e-portfolios, etc.).

**OOT Community.** 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 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.

**OOT Community - Groups.** 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.

### 3.9 How can I promote self-regulated learning and continuous professional development of FCNs?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-10>

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 [14] [15] [16].

Arguably the most well-known model of SRL is Zimmerman 's model and it concerns how SRL takes place 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. Professionals learning, in fact, increasingly relies on the individuals' control of their own learning, up to the point that - besides making decisions about the 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)" [17].

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 [18].

The 4Cs framework [10] [19], 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.

In your course, you can promote the enactment of these behaviours, so that students introject them and will then continue putting them in practice when at work.

One scenario is proposed for this topic, as presented in Table 9:

Scenario:	9A
Title:	4C Framework
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1858">https://oot.enhance-fcn.eu/mod/page/view.php?id=1858</a>

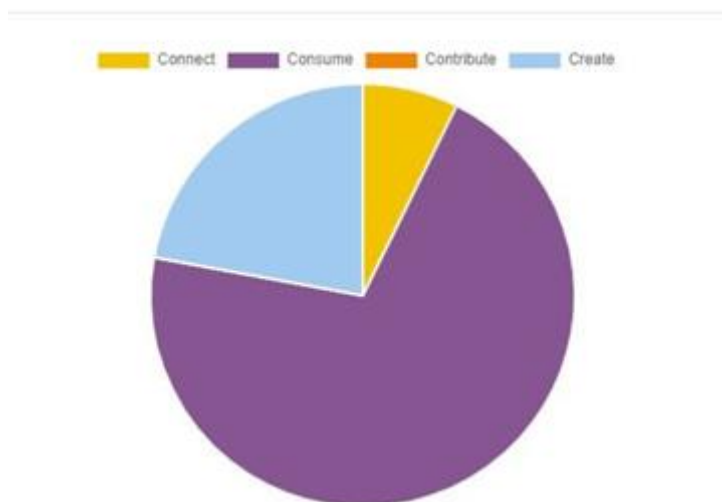
Table 9 - Scenarios for Topic 9

### 3.9.1 Scenario 9A - The 4Cs Behaviours

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.

If you want to promote your students' ability to self-regulate their learning process and encourage them to practice the above mentioned behaviours, you can propose collaborative techniques (see T3 "[How can I support collaboration among FCNs in my online course?](#)" for more details about collaborative techniques).

Then, if you want your students to monitor their behaviours during the collaborative learning process, this can be done through the 4Cs Dashboard functionality: each time a user enacts one behaviour in the online course (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 community's Dashboard. The Figure below shows an example of an individual 4C Dashboard, representing the behaviours enacted so far by one student.



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.

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**Meta-reflection.** 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 scenario 1C [Promoting students' meta-reflection throughout the course](#).



### 3.10 How can I support my students' motivation and engagement?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-11>

Motivating and engaging students is important especially in online 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 [20], is recognized as able to affect these two aspects mentioned above, even though cannot be considered a sort of panacea.

To provide you with practical suggestions on how to implement gamification in your course, we have drafted two scenarios (see Table 10).

Scenario:	10A
Title:	Gamification with Nurse Sally
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1859">https://oot.enhance-fcn.eu/mod/page/view.php?id=1859</a>
Scenario:	10B
Title:	Gamification with points and badges
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1860">https://oot.enhance-fcn.eu/mod/page/view.php?id=1860</a>

Table 10 - Scenarios for Topic 10

#### 3.10.1 Scenario 10A – Gamification with storytelling elements

Gamification elements can be used to motivate students and support their achievement of learning objectives.

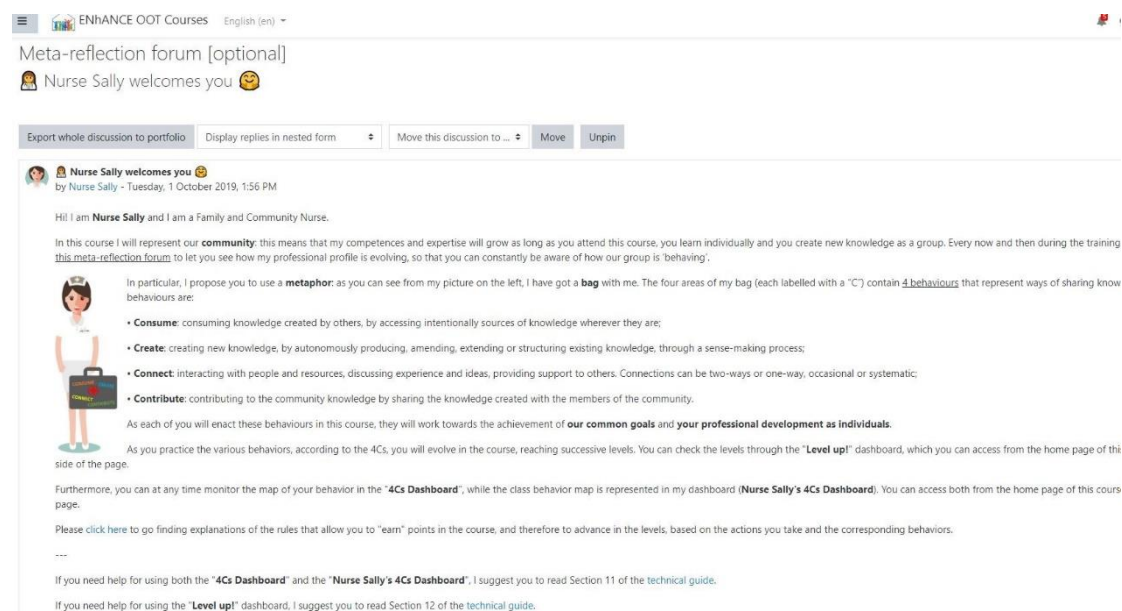
Gamification can be achieved by integrating into your course story telling elements, such as for example by creating fictional characters (typically enacted by tutors) who can be in charge of different aspects of your course (for example launching and monitoring specific activities of the course). The characters will need to fit with the training context, so for example, if you are in a Family and Community Nurse

educational context, you could create a "Nurse Sally" or a "Florence Nightingale", as they will sound familiar to your students.

An example of one specific aspect the fictional character can be in charge of, is meta-reflection (see also "Scenario 1C - [Promoting students' meta-reflection](#)"). In this case, Nurse Sally or Florence Nightingale will act as a sort of external, virtual tutor, who will appear in a bespoke Meta-Reflection Forum by introducing herself at the beginning of the course.

She can also introduce the 4Cs metaphor (see also T9 "[How can I promote self-regulated learning and continuous professional development of FCNs?](#)"), and propose the related 4 behaviours (Create, Consume, Connect, Contribute) as good ones.

In the following Figure, an example of a Nurse Sally presenting the 4C behaviours.

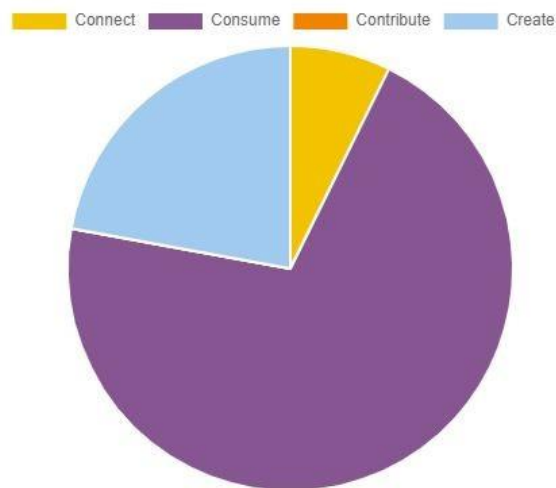


In the same Forum, during the course, every now and then, Nurse Sally or Florence Nightingale will prompt your students to reflect on what is happening in the community in a fun and effective way.

Moreover, she can invite to access the 4Cs individual or community Dashboard, so that students can monitor the learning process (see also Scenario 9A - [The 4Cs Behaviours](#)).

## Check below Nurse Sally's Report

[Dashboard](#) / [My courses](#) / [PLC01](#) / [Nurse Sally's Report](#)



[Show chart data](#)

- [Show nurse Sally's connect points](#)
- [Show nurse Sally's consume points](#)
- [Show nurse Sally's contribute points](#)
- [Show nurse Sally's create points](#)

### 3.11 How can I create Open Contents for my FCN training?



URL: <https://oot.enhance-fcn.eu/course/view.php?id=25#section-12>

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.

In your course you will need to prepare teaching materials for your students. You can prepare them by yourself or you can re-use materials created by others. In this latter case, you must 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 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 points mentioned above.

To provide you with practical suggestions, in the following we drew some scenarios regarding the points mentioned above (see Table 11).

Scenario:	11A
Title:	Creating Open Educational Resources
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1861">https://oot.enhance-fcn.eu/mod/page/view.php?id=1861</a>

Scenario:	11B
Title:	Sharing Open Educational Resources
URL:	<a href="https://oot.enhance-fcn.eu/mod/page/view.php?id=1862">https://oot.enhance-fcn.eu/mod/page/view.php?id=1862</a>

Table 11 - Scenarios for Topic 11

### 3.11.1 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/>).

### 3.11.2 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 content 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).

## 4 The online space for the Guidelines for teachers

The Guidelines for teachers have been published and are available from the web. To access the Guidelines, use the following URL: <https://oot.enhance-fcn.eu/course/view.php?id=25> (no registration is required, as the Guidelines are open and free).

The home page of the Guidelines is presented in Figure 1.

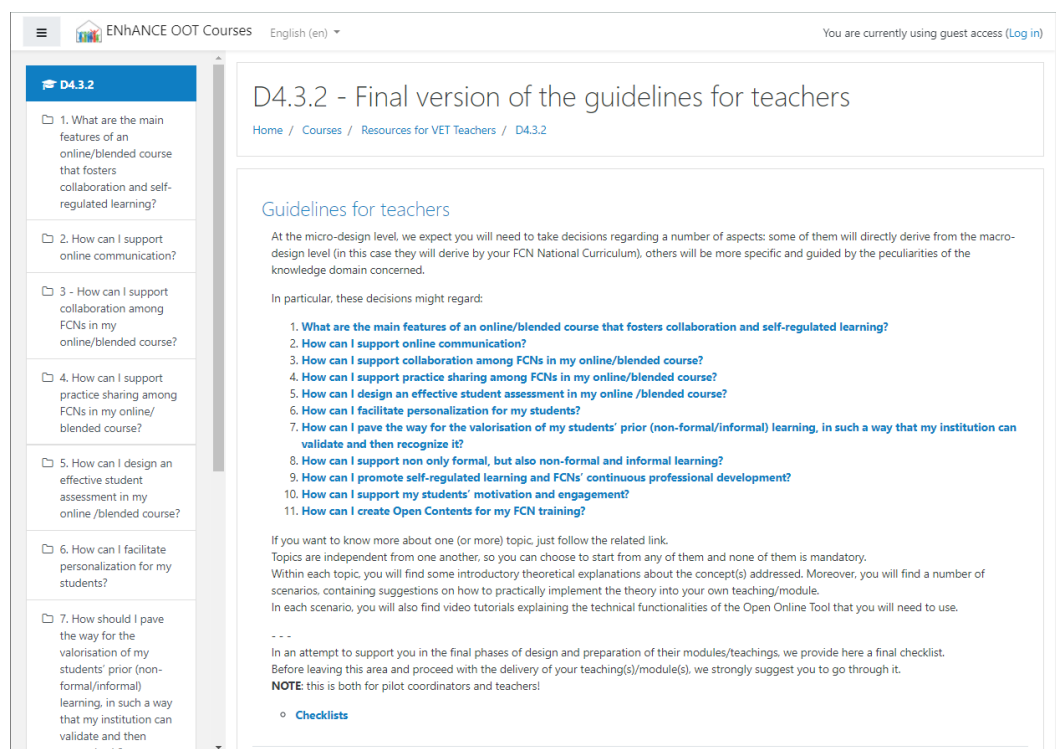


Figure 1 – Home page of the online space for the guidelines

## 4.1 How to access a topic (example)

To navigate one topic in detail, one can access it by clicking the direct link on the main menu presented at the top of the home page. Then, the page will scroll down to show the specific selected topic. In Figure 2, for example, topic 6 “How can I facilitate personalization for my students?” was clicked.

Alternatively, topics can be reached by selecting and clicking them through the menu on the left of the page.

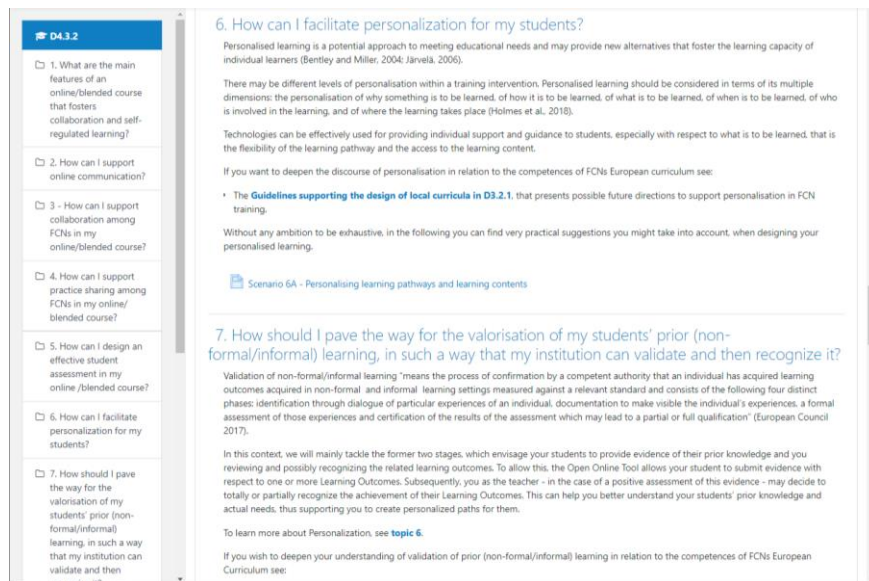


Figure 2 – Topic 6 “How can I facilitate personalization for my students?”



## 4.2 How to access a scenario (example)

To navigate one scenario in detail, one can access it clicking the direct link on the main menu presented in the related topic section. Then, the page of the scenario will open. In Figure 3, for example, “Scenario 6A - Personalising learning pathways and learning contents”, under topic 6 “How can I facilitate personalization for my students?”, was clicked. Also, in the page the explanatory instructional/tutorial video/s is/are presented.

The screenshot displays the ENhANCE OOT Courses interface. On the left, a sidebar lists topics under 'D4.3.2'. Topic 6, 'How can I facilitate personalization for my students?', is selected. The main content area shows 'Scenario 6A - Personalising learning pathways and learning contents'. It includes an introductory paragraph, a video player, and a 'Participants' table. The table lists participants with their names, email addresses, roles, and last access dates.

Participant	Email address	Role	Group	Last access to course	Status
Anna Sotoca	asotoca@upm.es	Teacher, Manager	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active
Anna Sotoca	asotoca@upm.es	Teacher	No group	19 Aug 20 hours	Active

Figure 3 – “Scenario 6A - Personalising learning pathways and learning contents”, under topic 6 “How can I facilitate personalization for my students?”

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