Project Title:	**ENhANCE**: EuropeaN curriculum for fAmily aNd Community nursE
Contract No:	2017 - 2976 / 001 - 001
EU Programme:	Erasmus plus
Start of project:	1 January 2018
Duration:	3 years

Deliverable No: D3.2.1

Guidelines supporting the design of local curricula – first release

Due date of deliverable:	28th February 2019
Actual submission date:	18th March 2019
Version:	D3.2.1 – v2
Authors:	Serena Alvino (SI4LIFE), Barbara Mazzarino (SI4LIFE), Cecilia Sistini (SI4LIFE) Madeleine Diab (AFBB), Lars Oertel (AWV), Hannele Turunen (UEF), Mina Azimarad (UEF), Francesca Pozzi (ITD-CNR), Francesca Dagnino (SI4LIFE/ITD-CNR) Flavio Manganello (ITD-CNR), Anna Maria Bagnasco (UNIGE), Milko Zanini (UNIGE), Gianluca Catania (UNIGE), Giuseppe Aleo (UNIGE), Ioanna V. Papathanasiou (UTH), Evangelos C. Fradelos (UTH), Dimitrios Papagiannis (UTH), Sofia Kastanidou (UTH)

Project ref. number	591946-EPP-1-2017-1-IT-EPPKA2-SSA
Project title	**ENhANCE** - EuropeaN curriculum for fAmily aNd Community nursE

Deliverable title	**Guidelines supporting the design of local curricula – first release**
Deliverable number	**D3.2.1**
Deliverable version	Version 2
Previous version(s)	Version 1
Contractual date of delivery	28th February 2019
Actual date of delivery	18th March 2019
Deliverable filename	ENhANCE_D3.2.1_v20190318.pdf
Type of deliverable	Report
Language	EN
Dissemination level	PU = Public
Number of pages	124
Work package	WP 3
Partner responsible	SI4LIFE
Author(s)	Serena Alvino (SI4LIFE), Barbara Mazzarino (SI4LIFE), Cecilia Sistini (SI4LIFE) Madeleine Diab (AFBB), Lars Oertel (AWV), Hannele Turunen (UEF), Mina Azimarad (UEF), Francesca Pozzi (ITD-CNR), Francesca Dagnino (SI4LIFE/ITD-CNR) Flavio Manganello (ITD-CNR), Anna Maria Bagnasco (UNIGE), Milko Zanini (UNIGE), Gianluca Catania (UNIGE), Giuseppe Aleo (UNIGE), Ioanna V. Papathanasiou (UTH), Evangelos C. Fradelos (UTH), Dimitrios Papagiannis (UTH), Sofia Kastanidou (UTH)
EC Project Officer	Urška Primec

Abstract	This document provides a detailed description of the activities carried out in T3.2 in order to provide an overall framework assuring the flexibility and modularity of the EU Curriculum. It includes a number of guides and tools which

	could be used by VET designers for the localization of the EU curriculum
Keywords	FCN EU Curriculum, flexibility, modularity, design tool, guide, VET designer

Signatures

Reviewed by	Role (Organization)	Date
Flavio Manganello	CNR-ITD	14/03/2019
Madeleine Diab	AFBB	14/03/2019
Approved by	**Role (Organization)**	**Date**
Francesca Pozzi	Project Coordinator (CNR-ITD)	18/03/2019
Flavio Manganello	Quality Manager (CNR-ITD)	18/03/2019

Table of Contents

List of Abbreviations

Abbreviation	Meaning
D	Deliverable
T	Task
VET	Vocational and Educational Training
WBL	Work Based Learning
WP	Work Package

Detailed Table of Contributors

In this table we list all the persons who concretely put into writing this Deliverable, taking the responsibility of the specific sections and related issues. These are recognized as authors of this document (see first page).

Moreover, we acknowledge in this table the partners who provided other inputs, especially in the plenary discussion which took place during Athens meeting and the preliminary writing of Tips and Recommendations (Annex 2). These are recognized as contributors of this document.

SECTION	CONTRIBUTORS	NAME OF PARTNER
2. Introduction	Serena Alvino	SI4LIFE
3. Organization of the work	Francesca Dagnino	SI4LIFE/ITD-CNR
4. How to instantiate a localized curriculum	Serena Alvino	SI4LIFE
4.1 Definition of EQF level and overall number of ECTS	Serena Alvino Madeleine Diab	SI4LIFE AFBB
4.2 Definition of modules	Ioanna V. Papathanasiou, Evangelos C, Dimitrios Papagiannis Sofia Kastanidou	UTH
4.3 Localizing the curriculum with the Flexibility table – User Manual	Francesca Dagnino	SI4LIFE/ITD-CNR

SECTION	CONTRIBUTORS	NAME OF PARTNER
4.3.1 The Flexibility Table	Serena Alvino Francesca Dagnino Cecilia Sistini Francesca Pozzi Flavio Manganello Ioanna V. Papathanasiou, Evangelos C, Dimitrios Papagiannis Sofia Kastanidou Hannele Turunen Mina Azimarad Madeleine Diab Lars Oertel	SI4LIFE CRN-ITD UTH UEF AFBB/AWV
4.4 How to manage the adaption from EQF7 to EQF6 - User manual	Madeleine Diab Lars Oertel	AWV/AFBB
4.5 Building modules – User Checklist	Ioanna V. Papathanasiou, Evangelos C., Dimitrios Papagiannis, Sofia Kastanidou	UTH
4.6 Flexibility Table – User Checklist	Francesca Dagnino	SI4LIFE/ITD-CNR
4.7 Flexibility Tool manual	Francesca Dagnino Barbara Mazzarino	SI4LIFE/ITD-CNR SI4LIFE
5. Designing an effective Work -Based Learning	Hannele Turunen Mina Azimarad	UEF
5.1 Analysis of current FCN curricula with respect to work-based learning: best practices	Hannele Turunen Mina Azimarad	UEF
5.2 How to design an effective WBL when localizing a FCN curriculum – User Guide	Hannele Turunen Mina Azimarad	UEF

SECTION		CONTRIBUTORS	NAME OF PARTNER
5.3 User Checklist		Hannele Turunen Mina Azimarad	UEF
6. Designing an effective Practice Sharing		Francesca Pozzi Flavio Manganello	ITD-CNR
6.1 Competencies and assessment		Ioanna V. Papathanasiou	UTH
6.2 How to design an effective PS when localizing a FCN curriculum – User Guide		Francesca Pozzi Flavio Manganello	ITD-CNR
6.3 User's Checklist		Francesca Pozzi Flavio Manganello	ITD-CNR
7. Designing the Students Assessment		Serena Alvino	SI4LIFE
7.1 User Guide: how to design student assessment when localizing the EU Curriculum		Serena Alvino	SI4LIFE
7.1.2 Selection of the assessment methods		Serena Alvino	SI4LIFE
7.1.3 Assessment Tools	Multiple choice question (MCQ) tests The "triple jump" examination Simulation/skills demonstration [SSK] The objective structured clinical examination (OSCE) Clinical reasoning	Anna Maria Bagnasco, Milko Zanini, Gianluca Catania, Giuseppe Aleo	UNIGE
	Student diary Assessment based on other data [OTH]	Francesca Dagnino	SI4LIFE/ITD-CNR
8. Personalization and individualization of the learning path for FCN VET		Madeleine Diab Lars Oertel	AFBB/AWV

SECTION	CONTRIBUTORS	NAME OF PARTNER
8.1 Theoretical background and current situation	Francesca Pozzi Flavio Manganello	ITD-CNR
8.2 Possible future directions to support personalization in FCN training	Francesca Pozzi Flavio Manganello	ITD-CNR
9. Recognition of Prior Learning (RPL) and Personalization of Learning Paths - Guideline for VET Providers	Madeleine Diab Lars Oertel	AFBB/AWV
10. Discussion	Serena Alvino	SI4LIFE
12. Annex 1: Tips and Recommendations Form	Serena Alvino Cecilia Sistini	SI4LIFE

SECTION	CONTRIBUTORS	NAME OF PARTNER
13. Annex 2: Recommendations and practical tips for the instantiation of the EU Curriculum	Eftychia S. Evangelidou, Aristides Daglas, Alise Vitola	ENE
	Christos Kleisiaris	TEI-CRE
	Hannele Turunen, Mina Azimarad	UEF
	Nadia Kamel	EUROCARERS
	Francesca Pozzi, Flavio Manganello, Marta Romagnoli	ITD-CNR
	Isabella Roba	ALISA
	Anna Maria Bagnasco, Milko Zanini, Gianluca Catania, Giuseppe Aleo	UNIGE
	Ioanna V. Papathanasiou, Evangelos C. Fradelos, Sofia Kastanidou, Georgia Garani, Konstantinos Tsaras, Dimitrios Papagiannis	UTH
	Madeleine Diab, Lars Oertel	AFBB/AWV
14. Annex 3: Current FCN curricula analysis: suggested competences best targeted by WBL	Hannele Turunen Mina Azimarad	UEF
15. Annex 4: Key questions relevant to developing and implementing validation of non-formal and informal learning	Madeleine Diab Lars Oertel	AFBB/AWV
16. Annex 5: The Four Phases of RPL according to the Cedefop (2015) – Draft Process for ENhANCE	Madeleine Diab Lars Oertel	AFBB/AWV
17. Annex 6: Country examples for RPL procedures	Madeleine Diab Lars Oertel	AFBB/AWV

1.   Executive summary

This Work Package 3 is aimed at:

a) designing learning-outcome based Curriculum for FCN which could play a reference role at European level for VET targeting this qualification; the flexibility and modularity of the Curriculum will assure the possibility of being instantiated/localized in the different EU countries taking into account their peculiarities and contextual constraints;

b) developing specific tools and guides supporting VET designers in the instantiation of the EU Curriculum into local curricula;

c) designing three localized curricula for FCN and three pilot courses that will be implemented in Italy, Finland and Greece.

Task 3.2 is aimed to pursue the second of the above listed aims, but its closely connected with the other two.

This document:

- provides a detailed description of the activities carried out in T3.2;

- includes a number of guides and tools which could be used by VET designers for the localization of the EU curriculum;

- provides an overall framework assuring the flexibility and modularity of the EU Curriculum.

Tools and guides provided in this document will be used, aside to the general EU Curriculum, by the project pilot designers in order to create their Localized Curriculum.

2.   Introduction

This deliverable is the first outcome of T.3.2.

According to the proposal, T3.2 is one of the task of WP3 and has the scope of producing set of guidelines (two releases, M14 and M35, in step with the two releases of the EU curriculum); these guidelines will be a reference for VET providers for instantiating the EU Curriculum (developed in T. 3.1 and delivered in D3.1.1[1] and D3.1.2) when designing a local curriculum in one of the EU countries.

As was clearly pointed out in D3.1.1 (Alvino et al, 2019), T3.1 and T3.2 are strictly connected and interdependent. On the one hand, **T3.1** is supposed to **define and describe the general characteristics of the EU Curriculum,** which should be as much "across-the-board" as possible in order to be adaptable to each EU country. On the other hand, **T3.2** is supposed to investigate, clarify and clearly outline **the main potentialities of the curriculum flexibility, providing tools and guide to VET designers** in order to support the instantiation of the general curriculum into specific localized curricula.

The above cited guidelines and tools, together with the EU curriculum **will be adopted, and therefore tested, during the design of the localized curricula in T3.3.** The local curricula will be furtherly instantiated into specific pilot courses, detailing specific materials, timing, course programs, teachers, logistics, etc. that will be tested in the framework of T6.2 activities (see Figure 1).

---

[1] https://drive.google.com/open?id=1XJTJctQ39W2gIt3ZPYALki6gqmWpKNyp
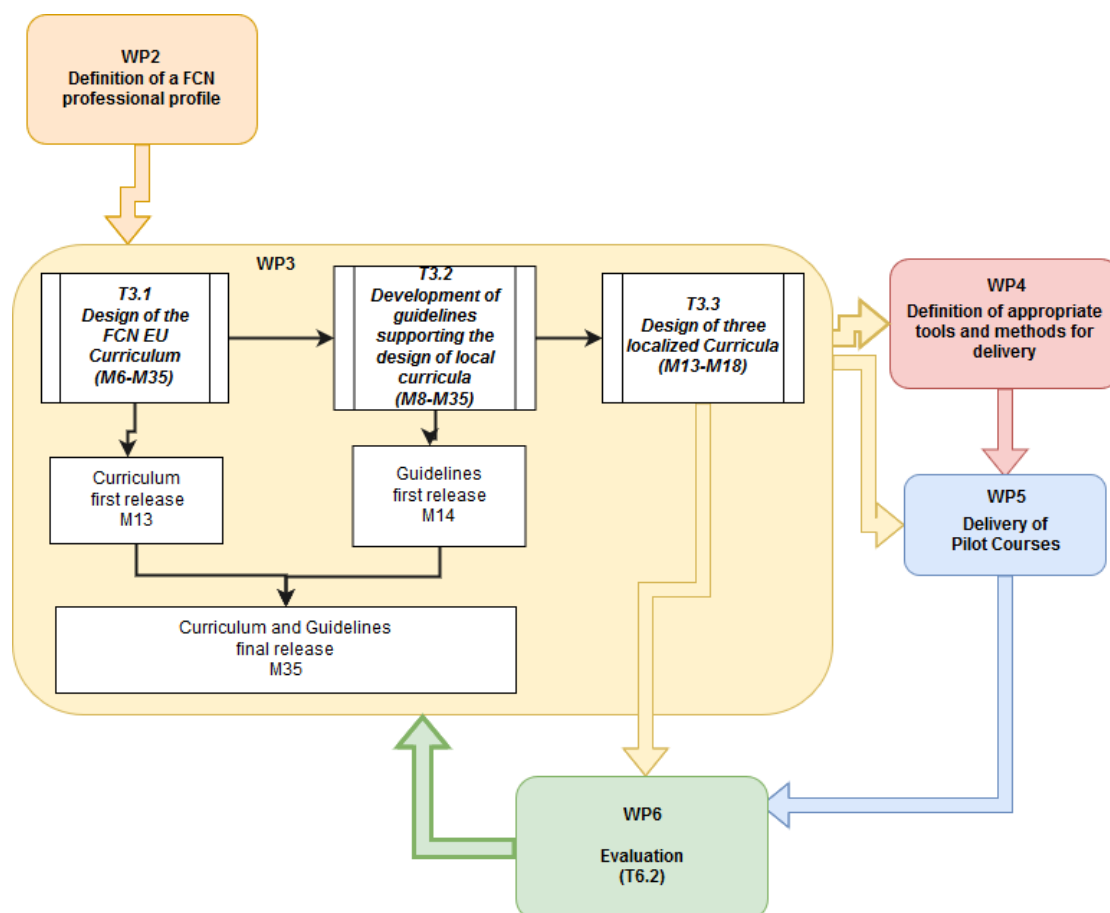
Figure 1: Overall process of Curriculum and Guidelines design, refinement and release

The final release of this guidelines (D3.2.2), delivered after the testing phase and a possible refinement, will be integrated in a user-friendly web-based interface able to provide an easy and interactive support to end users (VET designers) for the localization of the EU Curriculum.

Guidelines provided in this deliverable take into account all of the contextual elements defined in T2.1 and refer to the main aspects that need to be considered in the process of instantiating the EU curriculum in local instances, namely:

- the structure and composition of the localized curricula (number and list of modules) in the light of contextual needs and limitations;
- the definition of modules and their composition (Learning Outcomes) in the light of the indications provided by Experts in relation to the EU curriculum, and contextual issues:
- the integration of Work Based Learning (apprenticeships, etc.) and Practice Sharing activities in the curriculum taking into consideration local rules and issues (e.g. assurance issues, national/regional laws, etc. for WBL implementation);
- the design of students' Assessment
- the proper definition of personalized learning pathways, guiding designers and teachers/trainers in the management of a student-centered learning process empowering student self-awareness and responsibility in their personalized VET.

A specific attention is given to the role of technologies, and in particular of the Open Online tool developed in T4.1, to support activities envisaged in the curriculum.

For each of the above mentioned aspects, after a short introduction, manuals and checklist are provided so as to equip VET providers with useful and manageable tools.

These Guidelines aims to support the instantiation of the EU Curriculum into different kind of courses: in some countries the EU Curriculum could be implemented in a Second Cycle Qualification[2] with 60 ECTS, while in other countries could be implemented into a Continuing Education Course.

This document is organized as follows:

Section 3 of this document provides a detailed description of the work carried out by Partners in order to develop these guidelines (theoretical introductions and practical guidelines), as well as the description of the coordination action performed by the WP leader. As described in this section, Partners worked in parallel on different tasks.

Section 4 provide guidelines on how to instantiate localized curricula, which will be integrated, with respect to specific topics, by the contents of Section 5, 6 and 7. The Section includes indications on the necessary step to structure the curriculum, starting from the rationale behind the organization of Modules to their actual creation, making use of a tool purposefully created: the Flexibility table. The process and the tool are thoroughly described in this section, at the end of which two checklists are provided to help the VET provider in checking the correctness of process of module development and the adoption of the Flexibility table.

Section 5 is about WBL; in the first part is reported the analysis of the actual diffusion of WBL learning in FCN existing curricula and which competences are tackled through it. Afterwards, basic guidelines to implement WBL are provided together with a checklist (Action 3).

Section 6 is related to Practice Sharing and the competences that can be addressed through it. As for the other aspects, a manual on how to implement effective practice sharing and a related checklist are provided (Action 4).

Section 7 introduces the issue of assessment and how to localize the Assessment table that has been published in D3.1.1. Afterwards a short description of the proposed methods is provided.

Section 8 deals with the personalization and individualization of learning paths, providing a theoretical background and an overview of the current situation and opening possible future directions.

Section 9 is related to the recognition of prior learning, reporting the general procedures and guidelines for the validation of prior learning delivered by Cedefop (2015), and suggestions for their possible adoption in the Enhance project.

---

[2] See the "European Higher Education Area and Bologna Process" - Framework for Qualification of the European Higher Education Area - QF-EHEA http://www.ehea.info/media.ehea.info/file/WG_Frameworks_qualification/85/2/Framework_qualificationsforEHEA-May2005_587852.pdf

3.   Organization of the work

As stated in the introduction of this deliverable, T3.1 and T3.2 were tightly connected since they were expected to produce a EU curriculum, that should be modular and flexible in order to be adaptable to different national contexts and rules, and a set of guidelines and tools to allow the VET provider instantiating it locally.

For this reason, the work done in T3.1 provided results also for T3.2

As described in D3.1.1, the activities carried out in T3.1 have been organized since the beginning of the WP into different **Actions** which:

- were focused on different features/issues of the Curriculum in a multi-perspective approach;

- involved different Partners (with different background and competences) with the aim of focusing their analysis on specific issues and thus creating a sort of "internal experts" for each issue;

- have been coordinated by a Partner appointed by the WP leader, under the supervision of SI4LIFE;

Five main Actions have been identified by the WP leader (SI4LIFE). They have been carried out throughout the Task lifespan as outlined in Figure 2.
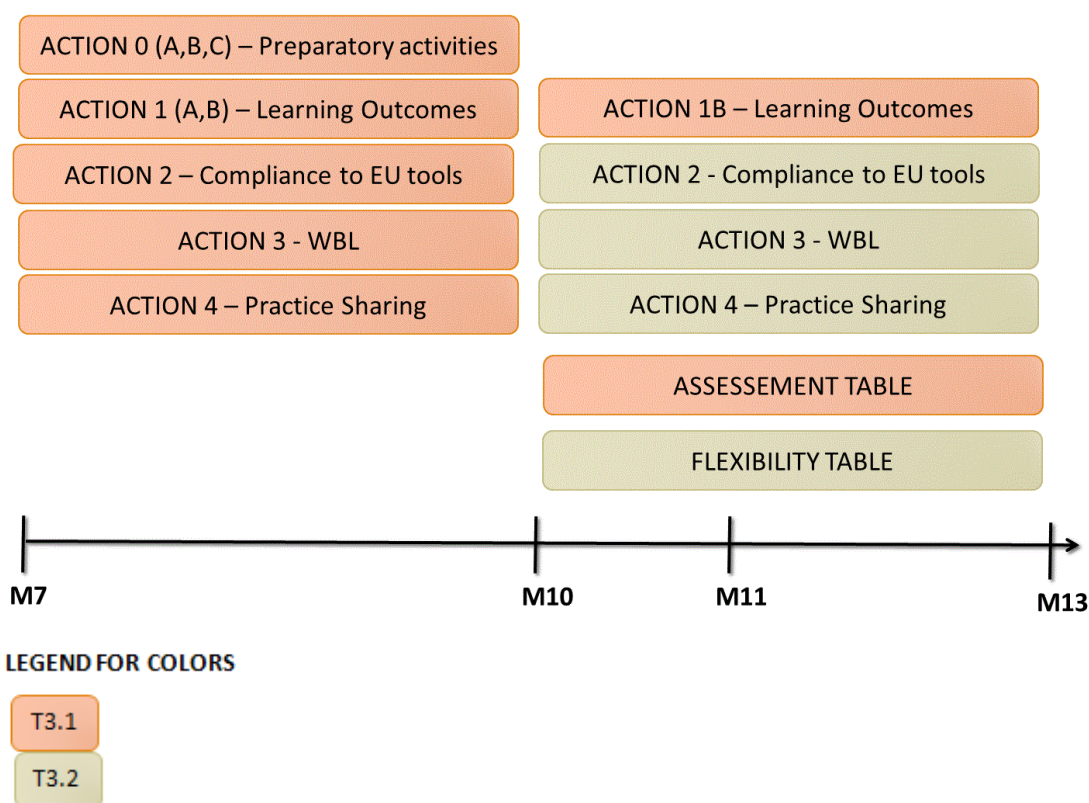

Figure 2: A simplified representation of the overall schedule of the 5 Actions identified in WP3 and the specific Task they contribute to throughout the Task lifespan

A detailed description of the Actions and their outputs has been written in D3.1.1, in the following we briefly refer to the Actions whose findings informed T3.2 and are reported in this deliverable.

ACTION 2

This Action was aimed at assuring the compliance of the WP3 results with the main EU standards and tools for VET (such as ECVET, EQAVET, ESCO, EQF, etc.) and with the expected results outlined in the project proposal.

Among the different topics tackled, two informed T 3.2:

1) **Personalized Learning Paths**: a definition of "personalization" and "individualization" has been provided.

2) **Validation of prior learning**: having recognized prior learning, students will be able to "personalize" their learning path if this is compliant with the local rules; this issue has been tackled at general level in this first release of the Curriculum and will be deeply addressed in the final one.

ACTION 3

This Action was focused on one of the main components of the FCN EU Curriculum, i.e. the **Work Based Learning (WBL)**. It has been coordinated by EUROCARERS and relied on important contributions of UEF (both appointed as 'experts in WBL'[3]).

This Action was aimed to pursue 3 main objectives, two of which informed T3.2:

1) The identification of **general rules** influencing and affecting the design of an effective WBL in FCN training. These rules have provided an important input for the definition of the Learning Outcomes composing the EU Curriculum and important hints and suggestions for the Curriculum instantiation discussed in this deliverable.

2) The identification of the main **competencies** which should be targeted through work-based learning and **the way they are normally assessed;** again, this information has been identified by a) analyzing the FCN Curricula collected in WP2, b) carrying out an analysis of the state of art in the literature and c) collecting important feedbacks from project partners. This information is reported in this deliverable

ACTION 4

This Action was focused on another important component of the FCN EU Curriculum, the **Practice Sharing (PS)**. It has been coordinated by CNR-ITD who has been appointed as "PS expert" in the final review of the task results, also taking into account the important competence of this partner in this field.

This Action was aimed to pursue 2 main objectives, that informed T3.2:

1) The identification of **general rules** influencing and affecting the design of an effective PS in FCN training. These rules have provided an important input for the definition of the Learning Outcomes composing the EU Curriculum, important hints and suggestions for the Curriculum instantiation could be derived from these rules, providing an input to T3.2.

2) The identification of the main **competencies** which should be targeted through practice sharing and **the way they are normally assessed.**

An analysis of FCN Curricula collected in WP2 has been carried out but with the scope of exploring the current adoption of PS. What emerged from the analysis is that PS is rarely described in formal curricula; aside to this, an important analysis of

---

[3] In D3.1.1 we explained how the activities carried out in the different Actions took us to define as "experts" of a specific topic then different Partners involved in T3.1/T3.2

the state of art in the literature has been carried out and project partners have been interviewed in order to collect information in a bottom-up approach.

Aside to the above described objectives, the Action targeted also two other important features of the Curriculum, the **recognition/validation of prior learning (formal, informal and non-formal)**; this last is presented in this deliverable.

Tips and Recommendations

To develop the guidelines reported in this deliverable, in addition to the results of the above cited Actions, a list of 'Tips and Recommendations' has been collected by Si4life from all the partners involved. The idea of collecting direct suggestions comes from the will of take advantage of the expertise gained by the partners during WP3 activities, asking them to share what they learnt in an easy and straight format, to make information easily accessible and manageable. Tips and recommendations may have a double aim: 1) to push Partners to translate "theoretical" knowledge in practical hints which could be included in the manual and checklists delivered by T3.2; 2) to formalize hints and recommendations as short sentences "talking directly to the target user" (the VET designer) in order to provide an input for the final release of this guidelines (D3.2.2) when they will be integrated in a user-friendly web-based interface able to provide an easy and interactive support to end users (VET designers) for the localization of the EU Curriculum.

Therefore, a form has been prepared and partners were asked to fill it (see form in Annex 1).

Envisaged contributions could range from theoretical recommendations (general of specific) for curriculum adaptations according to specific needs or regulations or its implementation, to more practical tips (e.g. administrative, logistics, practical didactics issues).

For each tip or recommendation, partners were asked to identify an area to which it was related among a selection: Assessment, Work Based Learning, Compliance with National curriculum and regulations, Definition of modules, etc.

Tips and Recommendations from partners were collected by Si4life and mapped to the areas proposed in the form and the typology (see Table 1)

	Tips	**Recommendations**
Assessment (criteria, tools, etc.)	1	5
Work based learning (apprenticeship, traineeship, etc.)	1	7
Compliance with National Curricula and National Regulations	1	3
Definition of modules	/	1
Level of study and compulsoriness/optionality of Learning Outcomes	/	2
Educational strategies	5	1
Practice sharing	3	3
Compliance with EC standard tools and classifications (ECVET, ESCO, EQF)	/	/
CREDITS	/	2

Other	12	3
Total	23	27

Table 1: Tips and Recommendations distribution per area

The analysis of the contributions made clear that the distinction between tips and recommendations was not clear-cut so this distinction was overcome.

A specific activity aimed to mapping the contents of the collected 'Tips and Recommendations' was organized by Si4life during the Athens meeting where partners went further than the preliminary analysis above presented. Partners were grouped per institution (each group was composed from partners of two institutions) and had the task to identify which tips and recommendations were related to a specific topic assigned. Five main topics were identified, that represent the sections of this deliverable (see Figure 3). In this way, 'Tips and Recommendations' were mapped against the areas in which guidelines should be developed for supporting the instantiation of the EU curriculum in the localized curricula and were taken into account in the preparation of the different sections.

A detailed list of the collected Tips and Recommendations is provided in Annex 2.
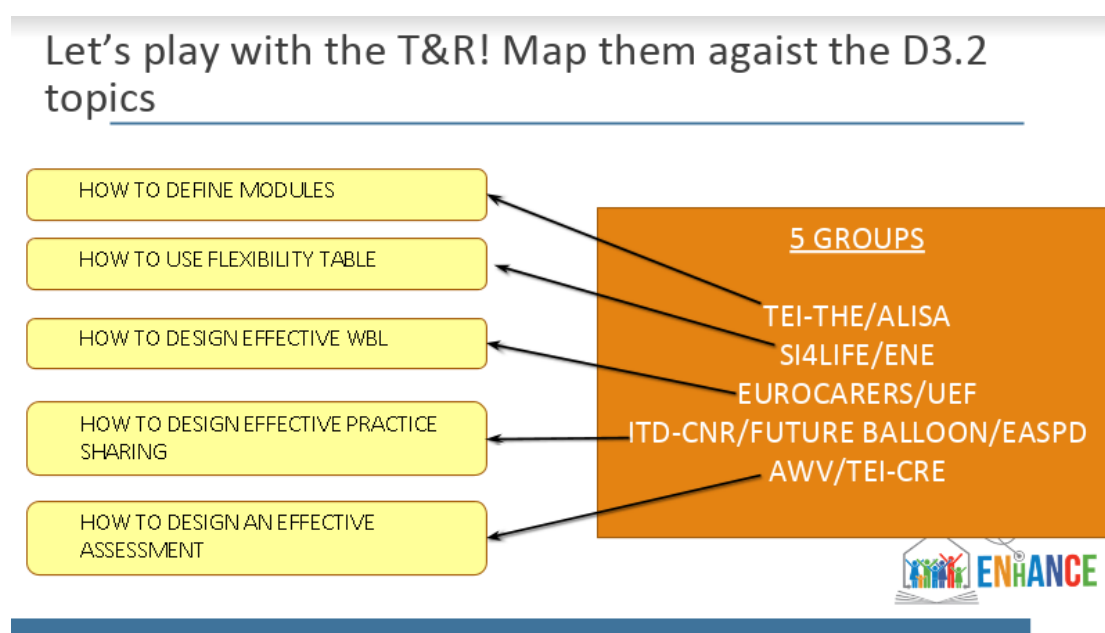
Figure 3 – Activity proposed during the Athens meeting

4.   How to instantiate a localized curriculum

As described in D3.1, Guidelines delivered in T3.2 have the aim of supporting the creation of a "localized curriculum", i.e. an "intermediate result" in the progressive design of a course, where the general curriculum is localized in terms of modules, a selection of LOs, learning strategies, assessment strategies, credits, etc. (see Figure 4).
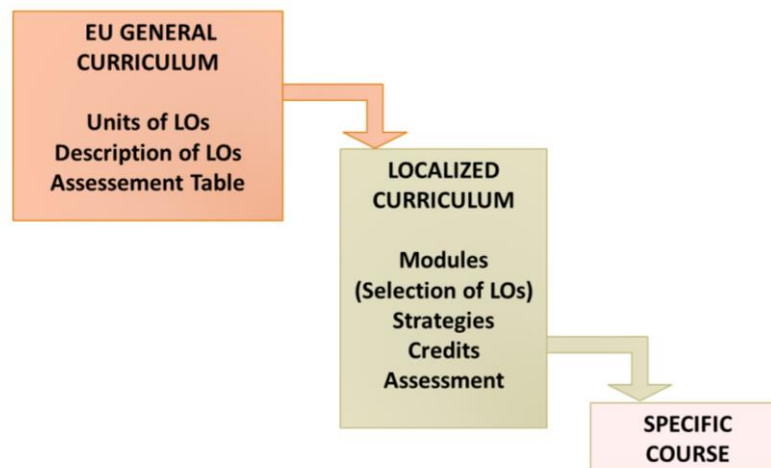
Figure 4: a graphical representation of the progressive instantiation of the general EU Curriculum in a specific course

Tools and guides for the instantiation of a localized curriculum will be included in D3.2.2

Other important characteristics of the EU curriculum are the following:

- the Curriculum has to include a **Work Based Learning component;**
- the Curriculum fosters the development of **Practice Sharing** through **formal, non-formal and informal learning.**

The instantiation of an effective WBL and Practice Sharing will be supported by specific guides and tools included in D3.2.

In the following sections, some of the above mentioned features and characteristics of the EU Curriculum will be analysed in detail.

In particular, in order to instantiate the EU Curriculum into the localized curriculum the designer should:

- follow the guidelines and tools provided in this Section plus, of course, the EU Curriculum and the Assessment table provided in D3.1.1 (Alvino et al, 2019);
- refer to the guides in Section 5, 6 and 7 as to specific issues concerning Work Based learning, Practice Sharing and the Assessment.

The localized curriculum will be organized in Modules that the designer will nurture with the LOs described in the EU curriculum.

The following sections represent a manual guiding in the process of Curriculum localization.

First of all, the issues of the EQF level and the number of credits will be tackled.

Then, a rationale behind the decision to organize the curricula in Modules is provided as well as a short definition of what is a module with some practical examples.

To support the designer in effective localization of the EU Curriculum, the consortium set up **the Flexibility Table:** it provides useful information about each LO on a range of characteristics (see section 4.3); taking into account this information, the designer will be put in the condition of preparing a localized curriculum that is complete, balanced and in accordance with the National standards.

4.1   Definition of EQF level and overall number of ECTS

The general Curriculum defined in D3.1.1 includes a detailed list of 53 Learning Outcomes (LOs), grouped into 7 Units of Learning Outcomes, and described in terms of "Knowledge", "Skills" and "Personal and Transversal Competences"; these LOs are clearly mapped against the 28 Core Competences composing the Professional Profile.

The EU Curriculum represents the common point of reference for the three localized curricula expected in the project and for the development of other localized curricula in the future. **The EU Curriculum targets EQF7 level / 60 ECTS, although it supports the design of curricula awarding more or fewer credits.**

Each academic year corresponds to 60 ECTS and in each semester 30 ECTS.
A preliminary step for the localization of the Curriculum is the **definition of the EQF/NQF level of the local Curriculum, and the relative number of awarded credits**. This should be done considering national regulations and institutional and other (e.g. labour market) requirements and depending on how many ECTS points you can deliver. The choice should be in line with the local context and there are several aspects to be considered, such as:

- the FCN qualification should always lead to a degree or certificate;
- the FCN qualification should be a stand-alone qualification;
- the FCN qualification should leave the option to continue the studies in case the FCN curriculum does not provide enough ECTS to reach a degree.

The localized curriculum can award less or fewer than 60 credits:

- when a localized curriculum **doesn't reach 60 ECTS**, the designer has adapted the general EU Curriculum by selecting a subset of LOs from the list and/or by addressing many LOs at basic level; awarding less than 60 ECTS means that the final course won't be able to certify an EQF7; since the target users of the EU Curriculum are supposed to be EQF6, their EQF level will remain the same;

- when a localized curriculum **goes beyond 60 ECTS**, the designer has adapted the general EU Curriculum by selecting more LOs than advised and/or by addressing them in an advanced way; awarding more than 60 ECTS doesn't mean to reach an EQF higher than 7, although the localized curriculum may be integrated in a Second Cycle Degree[4] with 120 ECTS (two academic years); in this case the FCN EU Curriculum should be integrated with other Learning Outcomes and contents.

Here are some examples of possible localized curricula.
1. *the curriculum is designed on EQF7 awarding 60 ECTS*; this approach is feasible:

---

[4] See the "European Higher Education Area and Bologna Process" - Framework for Qualification of the European Higher Education Area - QF-EHEA http://www.ehea.info/media.ehea.info/file/WG_Frameworks_qualification/85/2/Framework_qualificationsforEHEA-May2005_587852.pdf

    a. in countries where a 60 ECTS Second Cycle Degree that leads to EQF7 already exists (e.g. Italy, Spain, and Sweden) and the qualification can be linked to EQF7 via the NQF.

    b. in countries where a 60 ECTS Second Cycle Degree does not exist; in this case, the curriculum:

        I. can be designed addressing EQF7 (meaning the LO reflect EQF7) but it will award a certificate of further training; the level and the content of the FCN courses should be mentioned in the certificate and a list and description of LO should be included (similar to a diploma supplement) for transparency reasons.

        II. is delivered in the form of a Second Cycle Degree awarding on the whole 90-120 ECTS; in this way, the curriculum is integrated into similar study programs or extended by other LOs. FCNs will still receive a certificate and then be able to continue the studies and gain more ECTS points.

2. *the curriculum is designed on EQF7 awarding more than 60 ECTS*; this approach is similar to 1.b.II, but the curriculum covers more than 60 ECTS[5]

3. *the curriculum is designed on EQF6 awarding less than 60 ECTS; this approach is feasible*

    a. in countries where the curriculum cannot be designed on EQF7 (for strategic/institutional reasons: maybe the institution already offers similar modules on EQF6 that can be easily transformed to suit the FCN curriculum); in this case, the curriculum will lead to a certificate of further training; the level and content of the FCN courses should be mentioned in the certificate and a list and description of LO should be included (similar to a diploma supplement) for transparency reasons;

    b. where similar/comparable qualifications are on EQF6 and where these are delivered in the form of a Bachelor's Degree (EQF6, 180-240 ECTS); the curriculum can be integrated into similar study programs or extended by other LOs; FCNs will still receive a certificate and then be able to continue the studies and gain more ECTS points.

Adapting the ENhANCE Curriculum to EQF6 (Case 3) affects substantially the Curriculum itself, since the formulation of Learning Outcomes may require a modification, too; as a matter of fact, the curriculum should be thoroughly revised not just in terms of number of LOs and ECTS but also the way in which LOs are stated; this specific issue will be analysed in Section 4.4

Once the EQF level and the targeted number of ECTS were defined, the designer can start creating modules and choose the related Learning Outcomes with the support of the Flexibility Table

4.2 Definition of modules

4.2.1 What is a module?

In recent years there has been a paradigm shift taking place, moving the emphasis from teaching to learning and a more student-centred curriculum.

---

[5] If a designer selects all the LOs described in the Curriculum and addresses each of them at an advanced level, the maximum number of ECTS which could be awarded according to the Flexibility Table is 97,5 ECTS.

This change has affected the curriculum design process with a greater emphasis on the learning in terms of knowledge, skills and competencies within courses and modules. The focus is on how learners learn and the design of effective learning environments.

In the process of devising a module, the key is to forge educationally sound and logical links between learner needs, aims, learning outcomes, resources, learning and teaching strategies, assessment criteria and evaluation.

Modules are increasingly being used in many countries as a way of organizing a curriculum. Many course books are now structured on the basis of "modules" rather than "units".

The concept of "module" is strictly linked to the idea of a flexible curriculum, which should provide all those concerned with education with a framework to establish clear and realistic learning objectives. Such curricula can't be fixed once and forever – rather, they should be so flexible as to allow different needs to be met at different settings. This, in turn, implies describing learning outcomes so that they are recognisable, comparable across educational systems, and clearly amenable to assessment and evaluation.

Modules are not developed in isolation, but within a course or program structure, and the process is informed by the external national qualifications framework and where relevant, professional body requirements. Thus, internal and external factors must be taken into account at the planning stage.

A "module" is a portion of such a curriculum. It is a relatively autonomous portion, since it is based on a limited number of Learning Outcomes (Los) which the learner is expected to achieve, and teacher is expected to be able to assess and certify. This certification can be used as part of a unit-credit system, so that at each stage of the curriculum one should be able to demonstrate what sort of competence she/he has actually achieved. The basic idea of modularity is that at all levels there should be the opportunity to choose and combine modules in different ways according to the context of each particular teaching situation.

A module aims at developing a clearly identifiable and certifiable portion of the curriculum, expressed in terms of competence objectives (LOs). These objectives should be achieved within a clear and realistic time limit (modules usually range between 20 and 30 hours of teaching hours). This time limit is an important feature of the modular organization, since the whole curriculum is built around the idea that time and human and material resources should be spent to achieve foreseeable results. This, of course, may introduce an element of rigidity – this is why a modular organization implies constant monitoring and feedback to ensure that learning is really work-in-progress.

Planning a module is a process that requires time, commitment and a thoughtful, systematic approach.

Below are presented two examples of modules, drawn from FCN curricula.

Keele University U.K

EXIT AWARD: POSTGRADUATE DIPLOMA SPECIALIST COMMUNITY NURSING

Module: Evidence Based Practice
Retrieved at:
https://www.keele.ac.uk/nursingandmidwifery/cpd/postreg/modules/evidence-basedpracticeface-to-face/

Course duration: 15 Weeks
Credits: 15 Credits
Attendance: 12 x 3 hours morning sessions
Description:
The aims of the module are to develop both the student's understanding of the importance of best evidence in contemporary nursing practice, and their ability to locate, evaluate, and use best evidence in developing aspects of the nursing care that they deliver. It will combine a mixture of lecture presentations, smaller group speciality-specific tutorials, personal reading, and personal reflective exercises in order to increase the students' research-mindedness and confidence in their skills to improve clinical practice.
On completion of the module, participants will be able to:
- Discuss the principles of evidence-based practice and the political context within which it is located;
- Implement strategies for accessing sources of graded evidence, use frameworks to critically evaluate the suitability of located material;
- Discuss the strengths, weaknesses, and usefulness of a range of research methodologies in relation to evidence-based practice;
- Discuss relevant models for the management of change and utilization of evidence-based practice;
- Create a detailed plan for introducing an evidence-based practice development in their work area which includes identification of potential barriers to the implementation of change.

Module contents: Politics of Health, Principles of health economics, Forms of evidence and criteria lists, Role of audit, Sources of evidence, Reading and critiquing material, Recognized critiquing frameworks, Specific research methods [characteristics, strengths, limitations], Utilization of EBP and change management models, Barriers to implementing change, Developing protocols and clinical standards.
The module will utilize Web-Based Technology and a Virtual Learning Environment.
Type of assessment: Essay.
Brief description of assessment: 3000 words – to include a literature review of key current papers and recommendations for practice on an aspect of care that is not evidence based and related to the student's own clinical area.

University of Surrey

Primary and Community Care (District Nursing) (SPQ) MSc

Module: Application of leadership and management
Retrieved at: https://catalogue.surrey.ac.uk/2019-0/module/HCRM035
Number of Credits: 15
ECTS Credits: 7.5
Framework: FHEQ Level 7
Description: The Module supports students to reflect critically on their current knowledge, skills and attitudes to leadership, exploring current theory and applying to their own development needs. Contemplates their role in leading practice for the future.
Learning Outcomes Developed:
- 001 Reflect upon and critique their own leadership skills and qualities (PT)
- 002 Critically appraise current thinking on how to lead and motivate a team to achieve a responsive and strategic service (CK)

003   Critically question the role of the current healthcare agenda in the delivery of effective leadership within a specific area of practice (CP)

Learning Outcomes Type:
- C - Cognitive/analytical
- K - Subject knowledge
- T - Transferable skills
- P - Professional/Practical skills

Overall student workload

Independent Study Hours: 114

Lecture Hours: 36

Methods of Teaching / Learning

The learning and teaching strategy is designed to facilitate students to reflect critically on their current knowledge, skills and attitudes to leadership. Students will explore current theory and apply to their own development needs in the context of their future role.

The learning and teaching methods include:
- Lectures
- Discussion
- E-learning
- Self-directed learning
- Reflection
- Alternative visit

4.2.2 From Units of Learning Outcomes to Modules

As said above, **the localized curriculum has to be organized in Modules.**

There are three basic elements involved in the process of designing a module:

1. Defining the learning outcomes;

2. Choosing the learning and teaching methods that can lead to attainment of outcomes;

3. Assessing student learning outcomes.

In the definition of the first two elements designers are supported by the Flexibility Table; for the last one, the general Curriculum defined in D3.1.1 also includes an Assessment Table providing a general framework for the assessment of each learning outcome in terms of criteria and methods, which designers (VET providers and teachers) can use.

When designing modules, the designer should remember that the following provisions can offer a greater likelihood of fostering a deep approach to learning:

- sustained interaction with content and others;

- relating new ideas to previous knowledge;

- providing explicit explanations and a clear knowledge base to students;

- structuring in a reasonable student workload;

- providing opportunities for students to pursue topics in depth so that they can understand

- the material for themselves;

- ensuring an appropriate assessment strategy

What is also important for a well-designed module is to clearly identify the areas that need to be addressed as this gives a clear focus to the design activity and inform your thinking at all stages as you work through the process; these areas should be compared with the Units of Learning Outcomes identified by the Curriculum in order to define the best criterion for setting up the modules.

Since the design of the EU Curriculum is based on ECVET, the Learning Outcomes have been grouped into Units of Learning Outcomes. These show some parallels with modules but, in contrast to a module, are not so much based on teaching requirements but to "*competence areas*" and "*FCN key activities*".

As stated by EU standards and tools in the field of VET, the Units of Learning Outcomes (UoLOs):

- should be designed in such a way as to provide as cohesive and structured a learning process as possible, with agreed coherent learning outcomes and clear criteria for assessment;

- can be determined on the basis of complete work assignments, working processes, areas of work, fields of action or fields of competence which are typical of the particular profession.

- should be designed in such a way that they can be completed as independently as possible of other units;

- should include all necessary learning outcomes (specialist, social and personal);

- should be structured and dimensioned in such a way that the relevant learning outcomes can actually be achieved in the given time.

- should be assessable.

Although both Modules and UoLOs actually result from the grouping of LOs, Modules mirror a "teacher perspective", while UoLOs mirror the "learner perspective"; so, the criterion adopted to group the LOs may be different

ENhANCE's Experts envisage **three possible criteria to set up the Modules of a localized curriculum:**

1. *The Modules coincide with the proposed 7 Units of Learning Outcomes:*
    A. Needs Assessment
    B. Decision Making Process
    C. Health Promotion And Education
    D. Communication
    E. Navigation As Care Coordinator And Patient Advocate
    F. Evidence Based Approach
    G. Enhance And Promote Individual And Family Health Including E-Health To Support The Quality Of Nursing Care

    The names of the modules (so far) are suggestions and can be changed.

2. *The Modules refer to the Groups of Core Competences/Key Activities identified by the project, but group them in a different way with respect to the defined Units*

    As described in D3.1.1, the ENhANCE Curriculum UoLOs have been defined on the base of the Key Activities which characterize FCNs according to the experts

involved in WP2 analysis; as stated in the project glossary, Key Activities are defined as

> "*an integrated group of professional competences, which are in their entirety necessary to perform a task relevant to the job profile. The key activities of one profession must together cover all activities for the performance of a profession, regardless of its application context.*"

Units of Learning Outcomes can be derived from key activities, thus they may be identical to the key activities of a profession, but can also be adapted according to the needs of a training operator or the relevant target groups.

So, for example, the 7 key activities can be grouped into 5 modules as follows:
A. Health Promotion And Education
B. Evidence Based Practices
C. Communication
D. Navigation As Care Coordinator And Patient Advocate
E. Enhance And Promote Individual And Family Health Including E-Health To Support The Quality Of Nursing Care.

3. *The Modules can be organized by grouping the 53 Learning Outcomes without taking into account the suggested Groups of Core Competences, Key Activities and Units of Learning Outcomes.*

It is up to designers deciding which LOs can be grouped together and how the modules can be named.

Taking into account all these elements, designer will find the best solution for their localized curricula

4.3   Localizing the curriculum with the Flexibility table – User Manual

> **N.B.:** "You" in this manual means: the persons/department responsible for VET design or teaching in your institution.

The Flexibility Table has been built with the scope to provide designers with detailed information on each LO, that are fundamental to take informed decisions to develop the localized instances. In particular, for each LO the table gives:

- an indication about the compulsoriness of the LO (mandatory/optional);
- the suggested learning strategy, both face-to-face and online (lecture, individual study, group work, lab, work based learning);
- the suggested level of study (basic/advanced);
- a possible range of credits (in terms of ECTS) to be assigned to the LO.

This manual has been conceived to support designers in a correct use of the Flexibility table; it "talks directly to the target user" by using a generic "you".

The final checklist, here provided, aims to allow the designer checking to have considered all the issue at play.

4.3.1 The Flexibility Table

NEEDS ASSESSMENT	MANDATORY/ OPTIONAL (M/O)	SUGGESTED STRATEGY					SUGGESTED LEVEL OF STUDY *basic AND/OR advanced*	ECTS[6] Possible range of ECTS to be assigned to the LO eg.[1-2]
		Lecture (f2f or online)	Individual study	Group work[7] (f2f or online)	Lab[8] (f2f)	Work based learning[9] (f2f)		
UoL A	**NEEDS ASSESSMENT**							
LO 1a	M	X	X	X		X	basic/advanced	0,5-2
LO 1b	M	X	X	X		X	basic/advanced	0,5-2
LO 1c	M	X	X	X	X	X	basic/advanced	0,5-2
LO 3a	M	X	X	X			basic/advanced	0,5-2
LO 3b	M	X	X	X	X	X	advanced	1-2
LO 3c	M	X	X	X	X		advanced	1-2
LO 19a	M	X	X	X		X	basic/advanced	0,5-2
LO 19b	M	X	X	X	X	X	advanced	1-2

---

[6] 1 ECTS = 25-30 hours, depending on country.

[7] e.g.: problem based learning, case study, role play, plenary discussion, critical incident method, workshop, current /good practice sharing

[8] e.g.: role-play, simulation, etc.

[9] **Work based learning:** Whilst encompassing a broad range of activities and activity types, however, it is accepted that work-based learning centres on the acquisition of knowledge, skills and competences through action-based or reflective learning *in a vocational or occupational context*. (source: https://www.wbl-toolkit.eu/site/introduction/whatiswbl). These might include various forms, such as Apprenticeship, Stage, Internship and others, depending on national rules and training contexts. Apprenticeship, Stage, Internship, etc. can vary as far as the level of autonomy of the students and also the kind of supervision provided (faculty staff vs. staff external to the faculty, etc.). In our view, there is no need to specify the specific type of work-based learning at this stage, as this will give more flexibility to future adopters of our Curriculum to define the type of work-based learning that better suits their contexts.

LO 21a	M	X	X	X			basic/advanced	0,5-2

UoL B	DECISION MAKING PROCESS							
LO 2a	M	X	X				basic/advanced	0,5-2
LO 2b	M	X	X	X	X		advanced	1-2
LO 11a	M	X	X	X		X	basic/advanced	0,5-2
LO 22a	O	X	X	X	X	X	basic/advanced	0,5-1
LO 22b	M	X	X	X		X	basic/advanced	0,5-2
LO 23a	M	X	X	X			advanced	1-2

UoL C	HEALTH PROMOTION AND EDUCATION							
LO 4a	M	X				X	advanced	1-2
LO 4b	M	X				X	basic/advanced	0,5-2
LO 5a	M	X		X	X	X	advanced	1-2
LO 16a	M	X	X	X	X	X	advanced	1-2
LO 16b	M	X	X	X	X	X	basic/advanced	0,5-2
LO 17a	O	X	X			X	basic/advanced	0,5-1
LO 17b	M	X				X	basic/advanced	0,5-2
LO 18a	M	X	X	X	X	X	advanced	1-2
LO 18b	M	X				X	basic/advanced	0,5-2
LO 25a	O	X		X		X	basic/advanced	0,5-1

UoL D	COMMUNICATION							
LO 6a	M	X	X	X	X	X	advanced	1-2

LO 15a	M	X	X	X	X	X	advanced	1-2
LO 15b	M	X	X	X	X	X	advanced	1-2
UoL E	**NAVIGATION AS CARE COORDINATOR AND PATIENT ADVOCATE**							
LO 8a	O	X	X				basic/advanced	0,5-2
LO 8b	O	X	X				advanced	1-2
LO 14a	M	X	X	X	X	X	advanced	1-2
LO 20a	M	X	X	X	X	X	advanced	1-2
LO 20b	M	X	X	X	X	X	advanced	1-2
LO 13a	O	X			X	X	basic/advanced	0,5-1
LO 13b	O	X			X	X	basic/advanced	0,5-1
LO 27a	M	X	X	X		X	basic/advanced	0,5-2
LO 27b	M	X	X	X		X	basic/advanced	0,5-2

UoL F	**EVIDENCE BASED APPROACH**							
LO 9a	M	X	X	X		X	advanced	1-2
LO 10a	M	X	X	X		X	basic/advanced	0,5-2
LO 10b	M	X	X	X		X	advanced	1-2
LO 12a	O	X	X	X			basic/advanced	0,5-1
LO 12b	O	X	X	X			basic/advanced	0,5-1
LO 12c	O	X	X	X			advanced	1-1,5
LO 12d	O	X	X	X			advanced	0,5-1
LO 26a	M	X	X	X		X	advanced	1-2
LO 26b	M	X	X	X		X	advanced	1-2

UoL G	ENHANCE AND PROMOTE INDIVIDUAL AND FAMILY HEALTH INCLUDING E-HEALTH TO SUPPORT THE QUALITY OF NURSING CARE							
LO 24a	M	X	X	X		X	advanced	1-2
LO 24b	M	X	X	X		X	basic/advanced	0,5-2
LO 7a	M	X	X			X	basic/advanced	0,5-2
LO 7b	M	X	X	X		X	basic/advanced	0,5-2
LO 28a	M	X	X	X		X	basic/advanced	0,5-2
LO 28b	M	X	X	X		X	basic/advanced	0,5-2
LO 28c	M	X	X	X		X	basic/advanced	0,5-2

NOTES:

Here are some agreements adopted in order to define the suggestions included in the table:

- the range of ECTS has been redefined targeting an ideal number of 60 ECTS;
- as described in D3.1.1 (Section 8.4), in the Curriculum the description of the knowledge depth was initially expressed with the sentence "*know at an advanced level*": this formulation was not compliant with the standard of clarity of measurability adopted and was finally replaced with verbs or groups of verbs in order to reflect the concept (like 'describe in detail' or 'define and select the proper..); when modelling the Flexibility Table, Partners agreed to set as "ADVANCED" the level of study of those LOs which have been originally described using the expression "*know at an advanced level*"; for these LO the range of ECTS is 1-2 ECTS;
- as to the remaining LOs the level of study can be set as BASIC or ADVANCED; the level should be defined taking into consideration the strategies which will be implemented; the range will be 0,5-2; in case of BASIC we SUGGEST but NOT IMPOSE a lower range (such as 0,5-1,5 ECTS)
- Optional LOs have a range 0,5-1 ECTS, with the exception of LO12c which is optional but originally described with the expression "know at an advanced level"; this LO has a range 1-1,5.

4.3.2 Getting familiar with the Flexibility table

The table is organized as follows (see previous section):
- in row you will find the list of Los
- in columns the information about the specific LO.

The information provided in columns is introduced hereunder. More specific details will be provided in the following sections.

I) Mandatory/optional: in this column the designer retrieved the information on whether a LO is to be included in the curriculum optionally or mandatorily. Experts in the field have established that a certain number of the identified LO are essential in the FCN curriculum and have to be necessarily included in the curriculum (42). Others (11), marked as optional, can enrich the profile and be added but do not have, necessarily, to be part of the curriculum.

II) Suggested strategy: the columns report a list of possible strategies. The Experts suggested one or a number of them for teaching the specific LO. The designer can identify the strategy/ies to be applied (one or more among the suggested) for the local instance of the curriculum, taking into account the level of study tackled and the expected ECTS.

III) Suggested level of study: This column suggests a basic and/or an advanced level of study for each LO; it is in somewhat connected with the type of LO (more focused on knowledge, skills or transversal competences), the suggested strategies and with the supposed workload. In some cases, the same LO can be tackled at a basic or advanced level. Experts gave a strict indication for some of the LOs while for others let the designer free to decide. Of course, the level of depth is related to the time and effort devoted to the specific LO and the teaching strategies adopted. The Level of study will affect the number of ECTS recognized for the specific LO.

IV) ECTS (European Credit Transfer and Accumulation System): ECTS is a credit system designed to make it easier for students to move between different countries. Since they are based on the learning achievements and workload of a course the number of the ECTS assigned to each LO should be coherent with the 'Level of study'. In this last column, Experts have provided a range of ECTS for each LO. The designer should refer to this range in order to assign the number of ECTS for each LO, according with the envisaged workload.

1 ECTS credit corresponds to a range of 25-30[10] hours of work including lectures, seminars, group-work, practical work, work based learning, individual study, etc.

4.3.3 How to use the Table for designing a localized curriculum

This is the premise for starting the process of selection of the LOs with the help of the Flexibility Table.

Hereunder some basic indications for a fruitful adoption of the Flexibility Table, given in form of steps.

---

[10] The correspondence is different in the different countries, if you are not sure, please check the number for your country here: https://en.wikipedia.org/wiki/European_Credit_Transfer_and_Accumulation_System

Besides the paper-based table to be used as a reference, you will be provided with a **Flexibility Tool (FT)** reporting the fields of the Flexibility Table plus a column for Modules and one for assigning the ECTS.

The **Flexibility Tool (FT)** is available online[11] and will be described in the dedicated section (4.7); for each step the actions required in the tool are reported.

4.3.3.1 STEP 1 - Identify Mandatory/Optional LOs and include Mandatory in the initial list of selected LOs

The EU Curriculum is composed of 53 LOs. In the process of selecting the LOs for the localized curriculum the designer should, firstly, consider the second column of the Table, Mandatory/Optional.

First of all you need to include all the mandatory LOs (42 out of 53) in your list, because they represent the core of the FCN curriculum and cannot be disregarded.

Flexibility Tool: in the template Mandatory LOs are already selected in the dropdown menu, while Optional should be selected afterwards.

4.3.3.2 STEP 2 – Identify and select the proper teaching strategies

In the Flexibility table, a number of possible strategies has been proposed. The Experts have already provided suggestions about the most suitable ones for each LO. You have to decide which strategies you would like to adopt for the local curriculum, taking into account the workload.

The suggested alternatives are the following:

- Lecture: face to face or on line. Often based on a transmission of contents and support passive learning.

- Individual study: need to be included for the ECTS attribution. Includes preparation for examinations.

- Group work: e.g. problem based learning. This category envisages collaborative or cooperative activities. Can be carried out face-to-face or online, in class or both in class and at home. It usually requires more time and workload than a lecture. Support active learning

- Lab: e.g. role play, simulation. This strategy implies often to put into practice what has been learnt. It implies to put into practice what have been learnt. Can support active learning.

- Work based learning: the definition agreed in the Enhance project is the following : 'Whilst encompassing a broad range of activities and activity types, however, it is accepted that each has a similar goal that centres on 'the acquisition of knowledge, skills and competences through action-based or reflective learning in a vocational or occupational context'.

For some hints concerning the selection of Learning Strategies in relation to the Assessment Strategies see also Section 7.1.2

It is worth highlighting that lectures and individual study can only provide the theoretical part of an LO while skills and personal/transversal/social competences need to be targeted in a different way (WBL, Lab, et.). You should keep in mind this aspect while designing the local curriculum.

---

[11] https://drive.google.com/open?id=1uV3wj0oL6bb027i7ZlWNSiCRjAk8gq9t

Flexibility Tool: strategies can be selected putting a X in the related column.

4.3.3.3   STEP 3 - Define the Level of study for the LOs

It is necessary to define the level of study for each of the LOs and the corresponding ECTS.

To some LOs an advanced level is already assigned, others can be taught at basic and advanced level:

- • basic level: if the designer has selected strategies (in terms of number and typology) so to keep the workload contained and the contents are presented not at a deep level. For the basic level experts suggests range from 0,5 to 1,5 ECTS can be recognized;

- • the advanced level: implies a high workload and/or that contents are tackled at an advanced level. For the advanced level experts suggests a range from 1 to 2 ECTS.

Flexibility Tool: the level of study can be defined selecting from a drop-down menu in the column 'Level of study' the option 'Basic' or 'Advanced' (when possible – see notes to the Flexibility Table)

4.3.3.4   STEP 4 – Assign the ECTS

According to the level of study (basic/advanced) and the workload envisaged (the designer will assign the ECTS to each LO.

- • For Mandatory LOs that have to be addressed at an advanced level the suggested range is from 1 to 2

- • For Mandatory LOs that can be addressed at basic or advanced level, the experts suggested:

    - o For the basic level a range from 0,5 to 1,5 ECTS

    - o For the advanced level a range from 1 to 2 ECTS

For Optional LOs the range varies from 0,5 to 1

Remember that 1 ECTS corresponds to a range of 25-30 working hours.

Once the designer has assigned the ECTS to the whole list of LOs already selected she has to check the total against the expected number established for the localized curriculum:

- – If the maximum number of ECTS has been reached: the designer may be satisfied or she may want to reconsider her decisions because she wants to add also one or more optional LOs.

- – If the ECTS exceeded the maximum number established: the designer has to reconsider her choices.

- – If the number of ECTS does not reach the maximum envisaged: the designer may now add the optional LOs.

Before changing the current ECTS attribution, we suggest distributing the selected LOs into Modules

Flexibility Tool: you should select the number of ECTS from the range in column that is coherent with the level of study selected.

4.3.3.5   STEP 5 – Assign the LOs to Modules

After having assigned the ECTS to the LOs, LOs have to be distributed in Modules.

In Section 4.2.2 three possible criteria to organize Modules are proposed. You have to **draft a list of possible modules** based on one of the suggested criteria.

Take into account that:

- ✓ The minimum number of ECTS per module, must be at least two (2)
- ✓ The workload in the modules should be differentiated and given the greater importance to the modules who develop the special skills of the students who participate to the program.
- ✓ Ideally the most important modules will have same ECTS number

Flexibility Tool: the tool allows you to assign each selected LO to a Module (SHEET 1) and then gives back a summary of LOs and ECTS per Module in the sheet ECTS OVERVIEW. Finally, a report about the Modules and the LOs included in each one is presented in the third sheet (PLAN OVERVIEW), in the sheet the names of LOs are automatically retrieved from the other sheets while Modules can be named by the designer.

4.3.3.6   STEP 6 – Refining and balancing the curriculum

Now that the LOs have been distributed in the different Modules, you can come back to the LOs list to make the changes, if needed, in order to balance the composition of the Modules.

- If the maximum number of ECTS has been reached: you may want to change the level of study (and the correspondent number of ECTS) of the LOs in order to add other optional LOs

- If the ECTS exceeded the maximum number established: you have to reconsider her choices, also taking into account the workload required in the different Modules

- If ECTS do not reach the maximum number envisaged: you may now add the optional LOs, also taking into account the workload required in the different Modules

For each added LO you have to follow steps from 2 to 4. At this point you can allocate optional LOs directly to Modules.

4.4   How to manage the adaption from EQF7 to EQF6 - User manual

N.B.: For the adaptation of the Curriculum to EQF6 it is necessary to keep all (mandatory) Learning Outcomes in order to equip FCNs with the Core Competences necessary for their occupation but to reduce complexity of the Learning Outcomes as described in this manual.

4.4.1 Introduction

The use of the EQF and its eight levels as a "translation tool" between national qualification systems enables educational designers to describe learning outcomes units in such a way that they are comprehensible across countries and systems. At each level, the knowledge, skills and competence required to achieve the level are described. The EQF thus also provides a taxonomic orientation for the description of learning outcomes that are assigned to this level. However, the EQF does not describe specific qualifications or an individual's competences but levels of qualifications. Learning outcomes in EQF are therefore defined a little differently than in ECVET, including the dimension responsibility and autonomy (in addition to knowledge and skills).   The description of Learning Outcomes for the curriculum should take this into account and describe the level of responsibility/autonomy under "competence" as to facilitate the reference to the EQF.

Hence, to adapt the EU Curriculum from EQF7 to EQF6, all three dimensions – knowledge, skills and responsibility/autonomy – should be considered and line up with the official descriptors and requirements for EQF level 6.

For the adaptation of the Curriculum to EQF6 it is necessary to keep all 28 Core Competences but reduce their complexity and the related Learning Outcomes taking the following steps:

	Knowledge[12]	Skills[13]	Responsibility and autonomy[14]
EQF6	Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles	Advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study	Manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional development of individuals and groups
EQF7	Highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research Critical awareness of knowledge issues in a field and at the interface between different fields	Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields	Manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches; take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams

---

[12] In the context of EQF, knowledge is described as theoretical and/or factual.

[13] In the context of EQF, skills are described as cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).

[14] In the context of the EQF responsibility and autonomy is described as the ability of the learner to apply knowledge and skills autonomously and with responsibility

4.4.2 Concrete steps during the three stages

N.B.: The description of Learning Outcomes according to ECVET aims at ensuring a better understanding and comparability of qualifications and learning achievements across countries, institutions within a country or across qualifications.
It is therefore important to use a common language and common concepts when it comes to describing what a learner is able to do. It is a systematic way of structuring the qualifications acquired regardless of learning duration and learning location.
There are useful guidelines to support the description of Learning Outcomes:

- Guideline "Defining, writing and applying learning outcomes – a European handbook." by the European Center for the Development of Vocational Training (Cedefop 2017), available at http://www.cedefop.europa.eu/en/publications-and-resources/publications/4156
- "Get to know ECVET better - Questions and Answers" (ECVET User's group. 2011.), available at http://www.cedefop.europa.eu/files/ECVET_QUESTION_ANSWERS_Feb_2011_en(download_ID_17648).pdf
- ECVET toolkit website: http://www.ecvet-toolkit.eu/

4.4.2.1 STEP 1

Check all Learning Outcomes of the Curriculum and identify the ones that are clearly on EQF7 related to the EQF7 level descriptors. Please consider not only the title of the Learning Outcome but also the description of knowledge, skills and personal and transversal competences for your decision.

For example:

> LO22a: Know and apply leadership techniques that ensures clinical and healthcare effectiveness and appropriateness.

> LO21a: Assess the social, cultural, and economical context of patients and their families.

> LO18b: Effectively coordinate develop and implement policies for health promotion at family and community level

These Learning Outcomes are clearly at EQF7 since they require:

- specialised knowledge and critical awareness of knowledge issues in a field and at the interface between different fields (for assessment of context and coordination of policies at family and community level)

- specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures (for assessment of context and coordination of policies at family and community level)

- management skills and strategic approaches for complex and unpredictable situations (to ensure clinical and healthcare effectiveness and appropriateness.

4.4.2.2 STEP 2

Adjust knowledge, skills, personal and transversal competences to make it suitable for EQF6, for example by reducing one or all of the following:

a. knowledge (concepts, procedures, etc.)

b. skills (e.g. with regards to role model/leader/mentoring and tutoring activities)

c. complexity of situations (e.g. with regards to networks and contexts to act in)

d. responsibility and autonomy (affecting mainly leadership, mentoring and management tasks).

During this step, you can use other study programs from your institution or similar programs from other institutions to compare the Learning Outcomes.

4.4.2.3   STEP 3

If applicable

1.Rephrase the Learning Outcomes to match the content.

4.4.2.4   STEP 4

Communicate the level and complexity of the FCN's knowledge, skills and competences (e.g. in the diploma supplement or certificate) with the aim to create transparency and comparability among FCNs and their qualifications.

4.5   Building modules – User Checklist

	Yes	No	Partly	Comment
Have you thought through a rationale for your modules?				
Have you decided educational goals according to:				
1. Learners and their previous learning experience				
2. Content received from curriculum guides and frameworks				
3. Context physical or general (learning context through guided teaching or learning context through discovery and exploration, communication and collaboration)				
Have you thought about skills and attitudes communicated to learners?				
Have you determined and outlined events (concepts, objective, learning activities and evaluation) for a designed time period (weekly, monthly) that helps learners in attaching the goals of the module?				
Have you structured a well-developed lesson plan characterized by clear objectives/goals, content cohesion, programming accuracy and variety of educational tools, which is necessary in order to implement the subject-matter?				
Do modules develop and justify curricular choices that meet the needs of all learners?				
Do learning outcomes improve learner's achievement and preparation for the workplace?				

4.6   Flexibility Table – User Checklist

The check list has the scope to help the designer in monitoring to have used correctly the Flexibility Table for building the curriculum.

ISSUE	Yes	No	Partly	Comment
Preliminary actions	☐	☐	☐	
Have you established the total number of ECTS of the curriculum before selecting the LOs				
Defining the LOs list for the curriculum				
Have you checked to have included all the Mandatory LOs?	☐	☐	☐	
Have you taken into account the Experts' suggestions as to the **teaching strategy/ies** to adopt for each LO	☐	☐	☐	
Have you identified the proper **teaching strategy/ies** for each LO, according with the workload you established (ECTS range)	☐	☐	☐	
Have you defined the '**Level of Study**' for each LO accordingly with the effort/workload you envisaged?	☐	☐	☐	
Have you checked the coherence of the **ECTS you assigned** with the **range of ECTS** provided by Experts.	☐	☐	☐	
Have you checked the coherence of the **ECTS you assigned** with the teaching strategies proposed (and the related workload)	☐	☐	☐	
Have you checked the number of ECTS assigned against the number of ECTS established for the curriculum	☐	☐	☐	
Modules preparation				
Have you assigned the selected LOs to Modules	☐	☐	☐	
Curriculum refinement				
If the number of ECTS exceed the expected total number: have you revised the LOs in order to reach the correspondence? (adjusting the level of study and the strategies identified)	☐	☐	☐	
If the number of ECTS doesn't reach the expected total number: have you add Optional LOs to reach the correspondence (following the same process followed for mandatory LOs)	☐	☐	☐	

4.7 Flexibility Tool manual

The Flexibility Tool[15] will support the designer in the process of building the curriculum.

The tool is an Excel folder composed of 6 sheets (4 + 2 for reference)

1. The first sheet is a reference sheet (LOs names) providing the list of LOs, grouped into Units; another reference sheet ("Reference") is hidden and is aimed to support automatic calculation;
2. The second sheet reproduces the Flexibility Table (FT), with additional columns: 1 for assigning Learning Outcomes to Modules, a column for assigning ECTS and one check column (see Figure 5)

The third sheet (ECTS OVERVIEW) reports to which Module the LOs have been assigned and the number of ECTS recognized (see

3. Figure 6).
4. The fourth sheet (PLAN OVERVIEW) shows which LOs are composing the different modules
5. The last sheet (ASSESSMENT SCAFFOLDING) supports the design of Students Assessment and will be described in the proper section of this document (Section 8.1.2)

FLEXIBILITY TABLE TEMPLATE

| | MANDATORY / OPTIONAL | MODULE | SUGGESTED STRATEGY | | | | | SUGGESTED LEVEL OF STUDY | ECTS[1] | | | [: |
			Lecture (f2f or online)	Individual study	Group work (f2f or online) (e.g.: problem based learning, case study)	Lab (f2f) (e.g.: role-play, simulation, etc.)	Work based learning (f2f) (e.g.: apprenticeship, stage, internship...)		Possible range of ECTS to be assigned to the LO eg.[1-2]	Assigned ECTS [1]	Assigned ECTS check cell	[:
UoL A	NEEDS ASSESSMENT											
LO 1a	Mandatory	M1	X	X	X		X	Advanced	0,5-2	1,5		
LO 1b	Mandatory								0,5-2			
LO 1c	Mandatory	M2	x		x	x		Basic	0,5-2	1		
LO 3a	Mandatory								0,5-2			
LO 3b	Mandatory								1-2			
LO 3c	Mandatory								1-2			
LO 19a	Mandatory								0,5-2			
LO 19b	Mandatory								1-2			
LO 21a	Mandatory								0,5-2			
UoL B	DECISION MAKING PROCESS											
LO 2a	Mandatory								0,5-2			
LO 2b	Mandatory	M2	x		x			Advanced	1-2	0,5	check	
LO 11a	Mandatory								0,5-2			
LO 22a									0,5-1			
LO 22b	Mandatory								0,5-2			
LO 23a	Mandatory								1-2			

Figure 5 - Flexibility Table template

The sheet includes the following columns:

1. **Mandatory/optional (column B):** this column is already filled with respect to the Mandatory LOs; in such a way it guides the designer in taking into account firstly the Mandatory LOS. Optional LOs should be selected afterwards
2. **Module (column C):** the designer can select from the drop-down menu the Module to which the LO is attributed[16]
3. **Suggested strategies (columns from D to H):** the designer can put a x under the selected strategy/ies

---

[15] Available at https://drive.google.com/open?id=1uV3wj0oL6bb027i7ZlWNSiCRjAk8gq9t

[16] The current version of the FT envisages a maximum number of 10 Modules; the testing of the tool will provide feedbacks about the opportunity of increasing this number

4. **Suggested level of study (column I):** the designer can select from the drop-down menu if the LO will be addressed at Basic or Advanced level (see the meaning of basic/advanced level in the section 4.4.2.3 of the deliverable). For some LOs the level of study is already suggested in the Flexibility Table and the designer should

5. **Possible range of ECTS (column J):** a range of values is reported in this column, according to the level of study.
   a. For Mandatory LOs that can be addressed both at basic and advanced level the reported range is from 0,5 to 2 ECTS.
   b. For Mandatory LOs that should be addressed at an advanced level a range from 1 to 2 ECTS is reported.
   c. For Optional LOs is reported a range from 0,5 to 1 ECTS.

The designer will use this range as a reference for filling in the Column 'Assigned ECTS

6. **Assigned ECTS (column K):** here the designer assigns the number of the ECTS, according to the range provided in the column J (Possible range).

7. **Check cell (column L):** the cell will be automatically colored in red if the number of ECTS assigned is out of the range of reference

ECTS OVERVIEW: Modules and ECTS summary

In this second sheet LOs are listed in rows and Modules in columns. In each cell colored cell, corresponding to a LO associated to a module, the number of ECTS is provided. For each LO, the tool automatically retrieves the data about the Module and the number of ECTS from Sheet 1.

ASSIGNED	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10
ECTs	3	2	0.5	2	0.5	1	1.5	1	2.5	1.5
UoL A										
LO 1a	1	0	0	0	0	0	0	0	0	0
LO 1b	0	0.5	0	0	0	0	0	0	0	0
LO 1c	2	0	0	0	0	0	0	0	0	0
LO 3a	0	0	0.5	0	0	0	0	0	0	0
LO 3b	0	0	0	0	0	0	0	0	0	0
LO 3c	0	0	0	0	0	0	0	0	0	0
LO 19a	0	0	0	0	0	0	0	0	0	0
LO 19b	0	0	0	0	0	0	0	0	0	0
LO 21a	0	0	0	0	0	0	0	0	0	0
UoL B										
LO 2a	0	0	0	0	0	0	0	0	0	0
LO 2b	0	0	0	0	0	0	0	0	2	0
LO 11a	0	1.5	0	0	0	0	0	0	0	0
LO 22a	0	0	0	0	0	0	0	0	0	0
LO 22b	0	0	0	0	0	0	0	0	0	0
LO 23a	0	0	0	0	0	0	0	0	0	0

Figure 6 – ECTS OVERVIEW, Modules and ECTS summary

For example, as you can see in, LO1b was attributed to M2 and 0,5 ECTS assigned. In this way the designer has the summary of the composition of the Modules and the total ECTS per Module (Assigned ECTS row).

PLAN OVERVIEW: LOs distribution 'per module'

In this third sheet is displayed which LOs compose the different modules, reporting the name of the Module and of the LOs included in each one.
AS shown in
Figure 7, the sheet reports the Modules (sections of the sheet) and the LOs that refer to the specific Module. For each Module, the tool automatically retrieves which LOs (number and name) have been assigned to it.

Figure 7 – PLAN OVERVIEW (Modules and LOs overview)

5. Designing an effective Work Based Learning

Educational programs unquestionably affect clinical practice in a positive way. However, there are other learning approaches introduced to higher education to improve the outcomes. Work-based learning, presents opportunities for Universities and healthcare providers to work in partnership to realize the shared aims of developing nursing practice [Clarke & Copeland, 2003].

The definition of Work Based Learning agreed in the Consortium is the following

> "*Whilst encompassing a broad range of activities and activity types, however, it is accepted that work-based learning centres on the acquisition of knowledge, skills and competences through action-based or reflective learning in a vocational or occupational context*"[17]

These might include various forms, such as Apprenticeship, Stage, Internship and others, depending on national rules and training contexts. They can vary as far as the level of autonomy of the students and also the kind of supervision provided (faculty staff vs. staff external to the faculty, etc.).

5.1 Analysis of current FCN curricula with respect to work-based learning: best practices

In the framework of T3.2 Action 3 (see Section 3 and Figure 2), UEF team conducted an analysis on the current curricula of 17 countries (collected by the whole partnership during WP2 activities), with a focus on competences which were "targeted through" work-based learning only.

In an international meeting of nursing science experts, the above mentioned competences were identified and differentiated in red color (see Annex 3). The definition of work based learning reported at the beginning of this section was used for this analysis. There is no need to detail the specific type of work-based learning at this stage, as this will give more flexibility to future adopters of our Curriculum to define the type of work-based learning that better suits their contexts.

Information about curricula collected in WP2 is heterogeneous; this fact made challenging to draw a certain conclusion without any possible bias.

5.2 How to design an effective WBL when localizing a FCN curriculum – User Guide

> **N.B.:** "You" in this manual means: the persons/department responsible for VET design or teaching in your institution.

This Section provides a step-by-step guide for the design of an effective WBL when localizing the EU FCN Curriculum.

It envisages 4 main steps:

1. State the general aims
2. Design the WBL experience

---

[17] Workbased learning Toolkit, 2018 - https://www.wbl-toolkit.eu/site/introduction/whatiswbl

3. Train teachers for WBL

4. Set Technology-Enhanced WBL

Then a checklist is provided as a practical tool for VET designers and teachers in order to verify if the main steps described above have been carried out properly.

5.2.1 STEP 1- State the general aims

If you are offering Family and Community Nurses' courses based on the ENhANCE Curriculum, we strongly advise you to incorporate "Work Based Learning" (WBL) to your educational strategies in order to target all of our identified core competences and learning outcomes (See Annex 3).

During an FCN curriculum nursing students must practice in Public and Private Community Health Centers and Primary Health Organizations in order to:

- apply the theoretical knowledge acquired during their basic education in order to provide comprehensive and personalized health care and implement nursing interventions for the healthy and sick individuals, families and communities to meet all needs in physical, mental and social level;

- be familiar with the use of new technologies, medical instruments, equipment, devices, and therapeutic pharmaceutical schemes;

- develop communicational and interpersonal skills that are very essential for the effective and qualitative nursing practice;

- acquire real-time competencies about administration, organization and operation of a nursing unit in a Primary Health Care Organization;

- get advanced knowledge about modern methods of productive procedures.

5.2.2 STEP 2- Design the Work Based Learning (WBL)experience

According to the definition of WBL adopted by the Project[18], there is a broad range of activities in the spectrum of WBL. They might include various forms, such as Apprenticeship, Stage, Internship and others, depending on national rules and training contexts of each organization, can vary as far as the level of autonomy of the students and also the kind of supervision provided (faculty staff vs. staff external to the faculty, etc.).

The Council of European Union has provided a set of Recommendations for Quality and Effective Apprenticeship (EU, 2018).They provide a practical guide to be taken into account in order to set up an effective WBL.

Moreover, here we provide you with some easy tips to be put into practice in specific situations:

✓ Depending on the type of FCN specialization being offered, **check whether it is required to include WBL as a mandatory component**. It may not be necessary in the case of a shorter type of FCN specialization which targets professionally active nurses who already have accumulated a number of years of prior work experience. Shorter type of FCN specializations in the form of a 'professional certificate' or stand-alone modules are offered in some countries. These courses

---

[18] See Introduction to Section 5

can be offered by universities or professional nursing societies, and they often apply blended learning methods. In these cases, the courses mostly do not include any work-based learning at all other than what is stipulated by the course entry requirements, which however may require a number of years of work experience.

✓ In the case that the FCN specialization is being offered in the form of a **part- or full-time Master's degree** (60, 90 or 120 ECTS), WBL should cover at least 50% of the course.

✓ In the case of currently employed graduate nurses, most likely they will need to obtain **consent from their employer** that part of the work-based learning components of the FCN program takes place at the employer's site.

✓ When setting up the WBL, check that appropriate arrangements have been made to cover course participants in terms of their potential relevant **social security entitlements or other insurance issues** (covering occupational accidents, accidents and damages caused to third parties, occupational diseases and health insurance) that may concern them in particular in the context of their work-based learning placements. The requirements may also differ depending on the graduate nurses' current occupational status e.g. student, independent/self-employed, employed, unoccupied (on leave, unemployed etc).

✓ Ensure procedures are in place to ensure adherence to relevant EU or national regulations concerning the **protection of personal data**. In addition, the graduate nurses enrolled in the course may need to comply with the applicable rules to respect patient privacy (while delivering community-based care) and other confidentiality issues that may emerge during their course participation and in particular during their work-based learning. More generally, aspects dealing with legal, ethical and confidentiality issues linked to the provision of community or home care, might therefore need to be adequately addressed and integrated as learning modules in the theory part of the course.

As mentioned earlier, the ENhANCE Curriculum is designed to be flexible to meet the needs of its users in different countries and organizations. However, regardless of local differences and rules, we strongly advise you to **choose your WBL settings carefully to enable effective WBL**. Therefore, the following criteria must be taken into account:

✓ make sure that a learning culture is established in the work place setting (Williams, 2010);

✓ make sure that the work place setting is equipped with skilled facilitations to support the staff for giving critical reflections and enforcing positive changes in the students learning experience (Williams, 2010)

✓ make sure that the learning environment is supportive with a supportive atmosphere (Baraz et al., 2015);

✓ make sure that the WBL provides opportunities for informal interprofessional learning afforded by the workplace (Rees et al., 2018).

Although the WBL setting is very important and has a lot of power to make the WBL an effective experience, it would not result in its highest potential if a proper mentor is not dedicated for the students. To this end:

✓ make sure that the WBL tutor allows students to take control of their own learning (Williams, 2010);

✓ make sure that WBL tutor empowers students to make changes in their practice learning experience (Williams, 2010);

✓ make sure that the instructor is sufficiently qualified (Baraz et al., 2015);

✓ make sure that the mentor encourages students for informal interprofessional learning at their WBL experience (Rees et al., 2018).

In general, it is advisable to identify accurately contexts and tutors for the WBL. Students should perform at least a part of the WBL in contexts were FCNs are active. Tutors should be, preferably, family nurses with experience gained in the field.

5.2.3 STEP 3- Train teachers for WBL

If you want to offer a high quality WBL educational strategy in your courses for Family and Community Nurses, you need to make sure that the candidate teachers or trainers are able to deliver the expected results. To secure the optimal results, you are advised to imply a training session for your teachers/trainers focusing on the following aspects:

a. What competences/learning outcomes can meaningfully be addressed by WBL?

b. Which kind of WBL experiences exist? Which of them better fit the addressed competences/learning outcomes?

c. How to effectively design the chosen WBL experience? What are the components to be considered? (WBL form, duration, student's independent study, assessment, feedback)

d. How to effectively support the student during the WBL and how orchestrate the learning environment?

e. How to monitor and evaluate the learning process and how to assess students during and at the end of the WBL?

5.2.4 STEP 4 – Set Technology Enhanced (TE) WBL

If you want to support TE-WBL within your FCN courses, we recommend that you incorporate e-learning to support and enrich your WBL educational strategy. Innovative tutoring practices between teacher/trainer and student at clinical practice can be achieved by several means such as mobile app between student and teacher/trainer.

You can dedicate an e-portfolio for reflecting and analysing the learning process. Students need to reflect and analyse on their own experiences or even on the events that they have witnessed during their WBL and use the critical incident analysis method. Moreover, students need to be asked to conduct a literature review for evidence based practice.

To get more information about this innovative approach and know more about the latest research, please read the "*Use of mobile devices in nursing student–nurse teacher cooperation during the clinical practicum: An integrative review*" authored by C Strandell-Laine and published by Turku University of Finland in 2019.[19]

---

[19] Strandell-Laine, C., Stolt, M., eino-Kilpi, E., Saarikoski, M., Use of mobile devices in nursing student–nurse teacher cooperation during the clinical practicum: An integrative review, Nurse Education Today, 35(3), 2015, 493-499, doi:10.1016/j.nedt.2014.10.007.

This approach allows us to integrate academic learning with practice learning and optimize the results.

If you decide to adopt TE Work Based Learning (WBL) within your Family and Community Nurses' courses, you should check that the learning environment you chose may support the following features:

a. e-portfolio: this feature allows the teacher to have an on line a collection of electronic evidences (students' works) that let her evaluate student portfolios via Internet. E-portfolios, like traditional portfolios, can facilitate students' reflection on their own learning, leading to more awareness of learning strategies and needs

b. Functionalities that support resource sharing (database): this, for example, allow the teacher sharing contributions for the literature review

c. Wikis or forums to allow asynchronous tutoring and peer-tutoring practices

d. Instant messaging apps for synchronous tutoring

The Open Online tool which will be developed in ENhANCE project (see Task 4.1) will support the above mentioned features as well as other important ones which could provide a fundamental support for the organization, monitoring and development of an effective WBL.

5.3   User Checklist

Stage	Items	YES	NO	Date	Comments/Notes
STEP 1	Have you conducted a research about the rules of WBL offered by official ministries or organizations in your country?	☐	☐		
	NB: Please make notes of your research and highlight the more relevant ones for your target students.				
	Have you compared your results with the definition of WBL for Family and Community nurse courses in the ENhANCE project	☐	☐		
	NB: Please make notes of your results and highlight the differences if there were any.				
	Have you read he Council of European Union has provided a set of Recommendations for Quality and Effective Apprenticeship? Have you taken them into account as a premise for your design process?	☐	☐		
STEP 2	Have you applied the hints suggested in STEP 2?	☐	☐		
STEP 3	Have you carried out a teacher training as to WBL process design and management?	☐	☐		
	If YES, have you addressed the following issues?				
	a. What competences/learning outcomes can meaningfully be addressed by WBL?	☐	☐		
	b. Which kind of WBL experiences exist? Which of them better fit the addressed competences/learning outcomes?	☐	☐		
	c. How to effectively design the chosen WBL experience? What are the components to be considered? (WBL form, duration, student's independent study, assessment, feedback)	☐	☐		
	d. How to effectively support the student during the WBL and how orchestrate the learning environment?	☐	☐		

	e. How to monitor and evaluate the learning process and how to assess students during and at the end of the WBL?	☐	☐	
STEP 4	Have you applied Innovative tutoring practices between teacher/trainer and student at clinical practice (such as mobile app between student and teacher/trainer)?	☐	☐	
	Have you included some of the following features in your TE-WBL?			
	a. e-portfolio	☐	☐	
	b. functionalities that support resource sharing (database)	☐	☐	
	c. wikis or forums to allow asynchronous tutoring and peer-tutoring practices	☐	☐	
	d. instant messaging apps for synchronous tutoring	☐	☐	
Name of the responsible individual for checking the items Place and Date Signature				

6. Designing an effective Practice Sharing

6.1 Competencies and assessment

As already mentioned, a thorough searching of the curricula has been undertaken to understand whether and to what extent collaborative learning approaches are used in nursing education and what competencies and assessment methods are typically associated to them. However, the analysis of the curricula did not provide the expected results regarding practice sharing used to enhance the 28 competencies in placement. Most of the curricula provided a very brief reference to practice sharing and unfortunately, no more information is available. In addition, many links were not valid or curricula did not provide an English web page.

However, thanks to the experience collected by project partners in teaching students of higher education in the field of Nursing, some useful remarks can be pointed out.

The primary aim of students' practice sharing is learning through interaction for identifying and filling knowledge gaps, generating creative and innovative ideas, and boosting efficiency and competence by the aiding of their teachers. As already mentioned, there are different methods for succeeding this and some of them are listed below:

- discussion sessions,
- case studies,
- role plays,
- problem based learning activities,
- preparation and presentation of group essays,
- critical observation with feedback,
- video clips watching where community nursing is exercising by professionals followed by discussion about best practices as well as different approaches of treating similar situations.

Practice sharing is the main technique of offering students the opportunity to discuss their knowledge and skills with other students and their teachers in a classroom, and to receive feedback from hypothetical scenarios about different subjects, such as:

- Home Health Care in Different Health Systems.
- Homemade health care Self-care & self-management.
- Home care and family education.
- Care for the caregivers with chronic health problems and residential care.
- Home Help or Residential Hospitality Differences and Similarities.
- Volunteering and Domestic Nursing.

Some examples are provided below where different courses case studies are briefly presented as a way to support practice sharing.

- Students are divided into groups of 3 to 5 people. They have been assigned a topic of Community Nursing and during the semester they find five articles that have been published recently, i.e. over the last five years in reputable scientific journals, they study them and record the new knowledge that these articles offer on this specific topic. Then, they present the results in the class followed by discussion, exchange of views and critical analysis.
- Students are watching short (or even longer) films related to Community Nursing and then, they share common tasks in groups. In relation to the film, each student has to reflect on two or three different perspectives: that of the individual/client, his/her caregiver and of course the nurse/health care professional. After that, individual students share their opinions with their

groups and they conclude on common understandings, as well as fundamental differences regarding the values and the ideas that guide every day clinical practice. At the end, two group of students with diverse opinions, debate on the pros and cons of each and every approach in front of the classroom.

- Students present tutorial exercises about demographic community problems based on scientific material of the university library and electronic resources and archives. During the exercises there is a round rotation of the students. Emphasis is placed on nursing applications in Primary Health Care such as Community Health Services (multidimensional Health Centers), School Nursing (Presentation of Lectures with Health Education Methodology and Vaccinations in the School population) and workplaces (information on the provision of nursing services in the workplace and presentation of lectures).

In the description of practice sharing, there are learning outcomes that are related with the following core competencies:

1. Identify and assess the health status and health needs of individuals and families within the context of their cultures and communities,

3. Plan, implement and assess nursing care to meet the needs of individuals, families, and the community within their scope of competence,

5. Apply educational strategies to promote health and safety of individuals and families.

6. Communication competencies based on evidence in relation to a specific context.

11. Involve individuals and families in decision-making concerning health promotion, and disease and injuries prevention, and wellbeing.

12. Set standards and evaluate the outcomes related to nursing activities in people's homes and in the community.

16. Provide patient education and build a therapeutic relationship with patients and their families.

17. Analytic assessment, cultural competence, program planning, and community dimensions of practice to pursue community health promotion goals together with the community multidisciplinary team.

22. Development of nurse leadership and decision-making skills to ensure clinical and healthcare effectiveness and appropriateness.

25. Mentoring students to promote the health, and prevent disease and injuries, and wellbeing of individuals and their families and communities

26. Use the best scientific evidence available.

Especially in the field of Community Nursing, students could benefit significantly when sharing their knowledge and skills by addressing the health needs of individuals, families and communities in their natural environment. Students throughout practice sharing should learn how to respond to multiple roles and actions, creating a pleasant working environment and deciding and acting appropriately to fulfil them. It is intended that students develop skills in the area of health planning and collaborate in the development of integrated health promotion programs based on evidence from research and reflection on professional practices. The planning, management, professional socialization, applied skills and working relationships process, as a method of working with scientific bases, are some of the specific competences of nurses with a specialty in Community Nursing that must be fulfilled in the different contexts of practice sharing for a realistic view of their career

field. Furthermore, practice sharing is incredibly valuable for increasing self-confidence and encouraging reflective practice while providing students with those "missing skills" that employers seek in graduates.

Higher education environment must support students, managing relations, assessing and developing students, and ensuring critical reflective practice sharing. Most importantly, practice sharing should be seen as one of the most important tool for enhancing knowledge and professional skills. A wide variety of methods can be used to truly embed and address these competences in order to enhance graduate success.

Groups of students with their teachers who share an interest in Community Nursing can learn how to practice it better with practice sharing as it is explained above. To conclude, those of us who work within higher education must prepare and support students to develop the skills and behaviors they need in order to succeed throughout their careers. To this direction, practice sharing can certainly assist to a highly qualitative and successful graduate's career trajectory.

6.2 How to design an effective PS when localizing a FCN curriculum – User Guide

> **N.B.:** "You" in this manual means: the persons/department responsible for VET design or teaching in your institution.

6.2.1 STEP 1 – Introduction

If you want to offer innovative courses for Family and Community Nurses based on the ENhANCE Curriculum, it is recommended that you consider adopting active and collaborative learning approaches. This way, along with traditional teaching methods (such as lectures) that are aimed to tackle theoretical aspects, practical sessions are also proposed. Practical sessions could include:

- Collaborative learning approaches and practice sharing activities, where students are divided in groups and are proposed team work with different strategies, such as for example case study, problem based learning, role-play, etc.

- Laboratory sessions, where role-play and simulations are proposed. Simulations are used to help students getting familiar with technical skills (how to measure blood pressure, etc.) when you are at "entry" nursing educational level (bachelor), or with relational and communication skills when you are at the FCN level.

- Work based learning: whilst encompassing a broad range of activities and activity types, however, it is accepted that work-based learning centres on the acquisition of knowledge, skills and competences through action-based or reflective learning in a vocational or occupational context. These might include various forms, such as apprenticeship, stage, internship and others, depending on national rules and training contexts.

This section of the Guidelines focuses on how to effectively set up and offer collaborative learning approaches and practice sharing activities.

6.2.2 STEP 2 - Design of collaborative learning and practice sharing activities

Collaborative learning approaches valorize the single learner's experience through practice sharing and peer discussion, so to support the co- construction of new knowledge. Strategies, such as discussions, peer review activities, case studies, role-plays, problem based learning activities, jigsaws, etc. should be used to promote practice sharing and the development of the community dimension.

In case you want to propose collaborative learning activities within your courses for Family and Community Nurses, teachers should carefully design them (micro-design). Moreover, teachers should also allow students to be pro-active in proposing topics for discussion, exchange and collaboration among peers.

Further information regarding how to design these activities will be provided in the "Guidelines for teachers".

6.2.3 STEP 3 – Teacher training for practice sharing

If you want to support practice sharing and collaborative learning approaches within your courses for Family and Community Nurses, you should make sure your perspective teachers are able to propose meaningful collaborative learning activities. This might imply to train teachers (at least) on the following aspects:

- What competencies / learning outcomes can meaningfully be addressed by collaborative learning approaches?

- What collaborative learning techniques /methods exist and better apply to the competencies /learning outcomes to be addressed?

- How to effectively design a collaborative learning activity? How component should be considered (task, time, team, technology)

- How to effectively support students during the activity and how to orchestrate the learning environment?

- How to monitor and evaluate the learning process and how to assess students at the end of a collaborative learning activity?

If you want to retrieve materials that you could use in order to train your teachers, you can go to the following links:

6.2.4 STEP 4 – e-learning for practice sharing

If you want to support practice sharing within your courses for Family and Community Nurses, you could consider relying on e-learning or blended learning approaches. This will allow your leaners to take the most from the collaborative learning strategies, by taking also advantage of distance learning to guarantee flexibility to your course participants that could access materials and courses at their own pace and availability.

If you decide to rely on e-learning or blended approaches to support collaborative learning activities in your courses for Family and Community Nurses, you should rely on an adequate technological and organizational infrastructure.

To get indications on the technological features, go to STEP 5

To get indications on the methodological and organizational issues, you can access:

Brasher, A., Whitelock, D., Holmes, W. Pozzi, F. Manganello, F., Passarelli, M. Persico, D. Taulats, M. Carrillo, A. (2018). [Guidelines to improve the performance of online institutions.](#) CODUR Project - IO2-A3.

6.2.5 STEP 5 – Technological features for practice sharing

If you decide to rely on e-learning or blended approaches to support collaborative learning activities in your courses for Family and Community Nurses, you should check that the learning environment you choose supports the following features:

- Wikis, forums, groups, etc. as these functionalities will allow teachers (and students themselves) to propose collaborative learning activities

- Social networking functionalities as the community dimension is very important in collaborative learning. Optionally, you could even suggest (or offer) an informal social media for your course participants to interact outside the boundaries of the 'formal course'

- Functionalities able to support self-regulated learning, as this component is critical in collaborative learning, especially if this is proposed at a distance. This implies offering tools and methods to support autonomy, self- monitoring, planning and self-evaluation abilities

- Gamification functionalities to support participants' motivation and engagement in the learning process. In particular, it would be advisable to use digital badges with the aim to represent levels of competence achieved, to support the assessment of levels of Learning Outcomes achieved, and to show skills and competences gained through different experiences for the professional profile.

- "Adaptive' or 'intelligent' systems featured with learning analytics and recommending functionalities, in such a way that learners are proposed courses and materials depending on their previous learning outcomes and are supported as far as meta-cognition and self-regulated learning are concerned. This will also prevent dropout.

The Open Online Tool developed by the ENhANCE project supports all the above mentioned features.

6.3 User's Checklist

	DONE
You have set up either active/collaborative learning activities in the classroom and/or laboratory sessions and/ or work based leaning.	√
Your teachers have carefully designed the activities (micro-design) selecting among techniques such as discussion, peer review, case study, role-play, problem based learning, jigsaw, etc.	
You have offered your teachers adequate teacher training opportunities.	
During the teacher training, teachers have addressed the following areas: • What competencies / learning outcomes can meaningfully be addressed by collaborative learning approaches?	

• What collaborative learning techniques /methods exist and better apply to the competencies /learning outcomes to be addressed?	
• How to effectively design a collaborative learning activity? How component should be considered (task, time, team, technology)	
• How to effectively support students during the activity and how to orchestrate the learning environment?	
• How to monitor and evaluate the learning process and how to assess students at the end of a collaborative learning activity?	
(In case you have decided to rely on e-learning or blended approaches to support collaborative learning activities) -> you have set up an adequate technological and organizational infrastructure.	
Your technological environment is able to offer the following features: • Wikis, forums, groups, etc. as these functionalities will allow teachers (and students themselves) to propose collaborative learning activities • Social networking functionalities and/ or an informal social media for your course participants to interact outside the boundaries of the 'formal course' • Functionalities able to support self-regulated learning (e.g. tools and methods to support autonomy, self- monitoring, planning and self-evaluation abilities) • Gamification functionalities to support participants' motivation and engagement in the learning process (e.g. digital badge) • "Adaptive' or 'intelligent' systems featured with learning analytics and recommending functionalities.	

7. Designing the Students Assessment

According to the "*ECVET Manual for EMEU - Transfer, recognition and accumulation of learning outcomes*" (EMEU, 2016), the assessment of learning outcomes means "*methods and processes used to establish the extent to which a learner has in fact attained the knowledge, skills and competences described in the unit of learning outcomes*". The fact that learners' learning outcomes have been positively assessed and the result of the assessment is documented is the preliminary fundamental step for validating and recognizing learners' credits (ECTS or ECVET points).

The quality of assessment is essential for validation and recognition (see Section 9 of this document). It is therefore, important to consider the **integrity of assessment** which should be **valid, reliable, flexible and fair and based on evidence** that is **valid, sufficient, current and authentic** (EMEU, 2016).

In the Academic context usually many tools and procedures characterize the assessment process at national or local level. Universities often develop their own assessment tools and documentation, mainly referring to ECTS. According to the ECTS User's Guide (2009), credits should be allocated to learning outcomes for the entire qualification or to study programs as well as to learning outcomes associated with their educational components, i.e. learning activities. The allocation of credits to learning activities is integrated into curriculum design. The use of ECTS is compliant with the main transferability tools and procedures envisaged by ECVET (as demonstrated by BE-TWIN project, bridging ECTS with ECVET Points[20]), but tools supporting students assessment should be designed with the explicit aim to foster learning validation, recognition and transferability.

Downline to these premises, ENhANCE project aims to support a proper students assessment by (see Figure 8):

- integrating an **Assessment table** in the FCN EU Curriculum description (see D3.1.1), providing a general framework for the design of students assessment, in compliance with ECVET;

- providing VET designers with a **User Guide** supporting them in the proper implementation of the Assessment Table when localizing the EU curriculum (see Section 8.1);

- defining a **set of reference tools** (such as assessment matrixes) which could play a reference role for **VET teachers** during the implementation of a **specific course**.

As thoroughly described in D3.1.1 (Section 8.5), the Assessment Table defines criteria and methods for the assessment. The User Guide for VET designers is included in this document, while the set of reference tools for VET teachers will be developed in T3.3 (Design of three localized Curricula). The Assessment Table, the User Guide and the Tools will be tested in T6.2 and 6.3 in order to be refined and integrated in the user-friendly web-based interface delivered as the final version of the Guidelines (D3.2.2 – see Introduction to this document for details).

---

[20] BE-TWIN Project - TOOL KIT BRIDGING ECVET AND ECTS A GUIDE FOR PEDAGOGICAL STAFF http://www.ecvet-projects.eu/Documents/EN.pdf
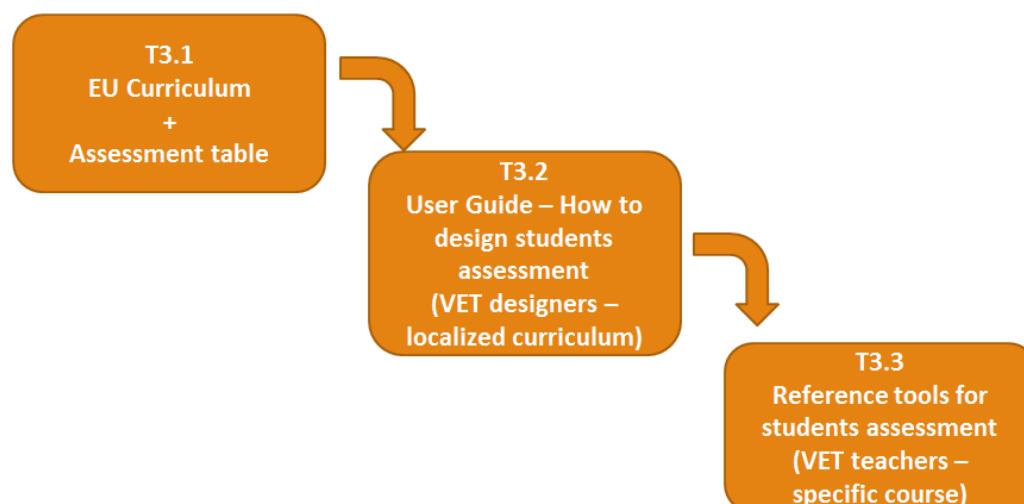
Figure 8: Description of the main ENhANCE tools supporting students assessment, by Task.

7.1 User Guide: how to design students assessment when localizing the EU Curriculum

> **N.B.:** "You" in this manual means: the persons/department responsible for VET design in your institution.

This guide is aimed at supporting VET designers in the definition of the main elements characterizing the Students Assessment in a Localized Curriculum for FCN.

Since the assessment process is closely connected with national rules and procedures defined by regulatory bodies and regional/local VET providers, a localized curriculum, which is an "intermediate result" in the progressive design of a course, is not supposed to provide a detailed description of the process, but to provide an "**assessment scaffolding**":

- assuring the coherence with the main design elements defined at this stage;

- providing an important input to the design of the design tools of a specific course.

To this end, this guide will support you to get aware of the main constraints you have to take into account when designing a localized curriculum and to formalize them in order to share them with VET teachers and, in general, with the designers of the specific local course.

At the end of this process, you'll be able to fill in the **Assessment Scaffolding Table included in the Flexibility Tool[21]** (see Section 4.7) which will be your initial input for the design of students assessment in your course.

7.1.1 Introduction to the Assessment table

---

[21] Available at https://drive.google.com/open?id=1uV3wj0oL6bb027i7ZlWNSiCRjAk8gq9t

To be able to validate and recognize the learning outcomes of individual students, a VET provider (or another competent body) is required to produce some documentation on assessment (e.g. what is called in ECVET terminology the "personal transcript"[22]). Aside to the details about the student and the assessor identity, the **assessment document** should contain information on learners' assessed learning outcomes, in terms of

(a) the total grade for the module or

(b) the grade for each component of the Learning Outcome (Knowledge, Skills and Personal and transversal competences) or

(c) a grade for each Learning Outcome

together with other comments or a written summary of the assessment.

In order to be compliant with ECVET without charging too much the workload of the teacher we suggest adopting the approach (c), i.e. a grade for each Learning Outcome. To this end, the Assessment Table defines reference information about the assessment **for each LO**; in particular:

- assessment criteria have been stated at three levels: satisfactory, good, excellent; this is just a suggestion, but a dichotomy "*pass/fail*" is also allowed and recommended for usability (see (EMEU, 2016))

- moreover, a range of assessment methods is suggested in coherence with the teaching strategies proposed in the Flexibility Table (see Section 5.3.1 in this deliverable); assessment methods were grouped into categories, so as to provide a guide in the selection but not to force the adoption of a specific method.

In line with the above described approach, **assessment criteria target the whole LO** (not each component as prescribed by the approach (b)), using the scale *SATISFACTORY – GOOD – EXCELLENT*. Criteria are clearly related to the agreed learning outcomes and to the expected EQF level, often underlining the important dimension of "responsibility and autonomy" of the student.

Anyway, the FCN EU Curriculum details each Lo in terms of Knowledge, Skills and Personal and Transversal Competences, as shown in Figure 9.

LO28c: Know the main ICTs supporting distance health monitoring and use the most common ones	
Knowledge	**Skills**
• Identify and describe the main ICTs that support distance health monitoring.	• Use the most common ICT tools for distance health monitoring in daily practice. • Assess the suitability and effectiveness of ICT tools and services for e-health monitoring. • Train patients and families how to use ICT tools for specific needs. • Inform individuals and families about advantages of ICTs' monitoring.
Personal and transversal competences	
• Have positive attitude towards ICT technologies in e-health monitoring. • Use ICT tools for e-health monitoring in daily nursing practice AUTONOMOUSLY. • Disseminate the ICTs' role in e-health monitoring. • Support professional development through ICTs. • Establish professional collaboration through ICTs.	
NOTES:	
Competencies related to tools for health monitoring are targeted by LO24a (this LO targets specifically ICT tools for distance monitoring)	

Figure 9: The description of LO28c in the FCN EU Curriculum.

---

[22] It is a record of learning achievements signed and stamped after the completion of a mobility period (EMEU, 2016).

The teacher should be aware of this fact and set up the assessment process in such way that **the important information concerning the different components of the LO is taken into consideration in some way**.

One way is to adopt the above described approach (b), but this could affect a lot the cost-effectiveness of the assessment process, in terms of required time and human resources. In addition, ECVET recommendation endorses orientation towards minimum demands for assessing the learning outcomes

An alternative way is to select effectively the proper assessment methods, integrating them in such a way to be sure that each component of the LO has been assessed.

7.1.2 Selection of the assessment methods

The Assessment Table envisages 5 main types of assessment methods. Each of them is supposed to be more effective than other ones to assess specific "components of the competence" and to be coupled with specific learning strategies.

A number of theories, well-established practices and patterns have been formalized in traditional and recent literature concerning the most suitable learning strategies for specific objectives and the most suitable assessment methods to be put into place to assess the related learning outcomes (see CARESS Project - Alvino et al. 2018); here is a very short list of hints drawing inspiration from them:

- ✓ the more complex the cognitive tasks are the more active, situated and contextualized should be the activities performed to master them; as well as these activities, assessment methods, aimed at demonstrating the mastery of the same learning outcomes, should be active, situated and contextualized;

- ✓ Learning Outcomes are defined through 3 main dimensions: Knowledge, Skills and Personal and Transversal Competences; each dimension can characterize the whole LO in different percentages, so sometimes a dimension can be prevalent or not present

- ✓ when "knowledge" (theoretical and factual) dimension is prevalent, the most proper learning strategy is usually a "traditional" lesson or the individual fruition of effective learning materials; especially in adult learning, when time for learning is particularly precious, the individual fruition of materials (in e-learning for example) is often preferred to other strategies; as to the assessment methods, traditional methods such as written exams or assignments or oral exams are preferred since they are effective and time saving;

- ✓ when "skills" dimension is prevalent, active practice is fundamental and learners should be involved in activities which foster them to put in practice the addressed skills; learning strategies such as learning-by-doing, problem-based learning, simulations, drill & practice and so on should be the proper strategy in this case; especially in FCN context, work based learning (WBL) is fundamental di develop practical skills; in a similar way, assessment methods should make the student put into practice the targeted skills in order to show if they are mastered or not, accordingly to the description of the Learning Outcome itself; the assessment of the activity performed during the WBL is fundamental to assess the skills of a student;

- ✓ when the "Personal and Transversal Competences" dimension is prevalent, learners should be actively involved in situated and contextualized activities, possibly in group, through collaborative or cooperative tasks; the learning strategy should provide a "scaffold" for the learner to play a specific role in an

authentic context, possibly involving also informal or non-formal learning processes, fostering the sharing and internalizing of tacit knowledge; in the same way, an assessment method should foster the demonstration of these competences in a situated context; to this end, virtual environments (such as the Open Online Tool delivered by ENhANCE) could support the teacher in the design of situated contexts where both the learning and the assessment process can take place;

✓ when a competence is articulated in many dimensions (and this is what often happens), different strategies can be integrated in order to address the different components of the competence.

As already stated, the FCN EU Curriculum describes each LO in terms of the above described different components; as to some LOs, such as LO28c, outlined in Figure 9, a prevalent component can be identified (the "skill" component is prevalent in this case), but many times LOs are complex and articulated and involve the 3 dimensions in the same way.

In order to choose the proper Assessment Methods we suggest to follow these steps:

STEP 1: **analyse the description of the selected LOs** in order to identify possible prevalent components;

STEP 2: **check your choices in the Flexibility Tool** (see section 5.7) as to the learning strategies: what are the strategies you selected? is WBL planned? etc.

STEP 3: fill-in the Assessment Scaffolding sheet of the Flexibility Tool

This sheet allows you to formalize the main assessment tools you would like to apply in your localized curriculum, by Modules and the related LOs.

Once provided the Modules names in the sheet "*Plan Overview*" and filled in the "*Flexibility table*" sheet, the "Assessment Scaffolding" sheet will show you automatically the distribution of the selected LOs by module.

Then for EACH LO, in the proper column, you have to list the assessment tools you would like to adopt for each of the methods you want to implement; the implemented methods should be compliant with the ones suggested in the Assessment Table (see D3.1.1).

Once you've filled in the sheet with the tools, it will automatically show you the "*relative weight/importance*" provided to each method in the Module, by showing the relative percentage (% of total collected items) (see Figure 10)

M2	module 2	ASSESSMENT TOOLS				
		WE	OE	A-WBL	SSK	OTH
		0,00%	50,00%	0,00%	25,00%	25,00%
LO 1c	Contextualize and apply needs assessment taking into account cultures and communities		discussion		osce	
LO 2b	Take decisions based on professional ethical standards		discussion			portfolio

Figure 10: A portion of the Assessment Scaffolding sheet

The Methods envisaged by the Assessment table are the following:

- *Written exam/assignments [WE]*: this method is based on the use of traditional tools such as written tests or essays;

- *Oral exam [OE]:* this traditional method is based on a discussion or dissertation in which an examiner poses questions to the student in spoken form;

- *Assessment of WBL [A-WBL]*: it includes each procedure and tool which is used to assess the student when involved in WBL; the assessment can be done by the teacher, by the tutor of the WBL or by the student himself (self-assessment)

- *Simulation/skill demonstration [SSK]*: it includes a number of strategies and tools supporting the demonstration of a specific skill in a situated context;

- *Assessment based on other data [OTH]*: this category includes all the methods which not fall under the previous categories, such as the ones related to the use of ICTs (e.g. collection of tracking data and learning analytics) or innovative tools such as e-portfolios or specific functionalities of Virtual Environments (such as the Open Online Tool delivered by ENhANCE).

On the base of the results of STEP 1 and STEP 2, you can choose the proper assessment strategies and tools, **trying to assure that each component of the LO will be assessed in the proper way.**

In the following sections, some examples of Assessment Tools are provided for each of the above listed categories.

7.1.3   Assessment Tools

7.1.3.1   Written exams/assignments [WE]

MULTIPLE CHOICE QUESTION (MCQ) TESTS

There are many feasible tools for the assessment of clinical practice, but there is a wide consensus on the fact that including in this process the simultaneous use of several different methods could be strategic for a comprehensive overall judgment of clinical competence. Multiple-choice questions (MCQs) are a well-established reliable method for knowledge assessment, increasingly used in postgraduate exams, owing to their higher validity and easy scoring. Using MCQs could be the first step for the assessment of clinical competence. Multiple choice question (MCQ) tests are a tool for assessing the learning and / or knowledge that future health professionals encounter on various occasions during their training.
If appropriately constructed, MCQs could be efficient, objective, discriminative in combination with other tools to get a comprehensive competence assessment strategy. Cognitive knowledge assessed by MCQs is well related to overall competence and performance, but examinees and examiners alike often perceive this tool as unfair. MCQs could be designed to evaluate the extent of the candidate's knowledge and clinical judgment in the areas in which an internist should demonstrate a high level of competence and thinking but, likewise other methods of assessment, they have some advantages and limitations, requiring a high level of discriminating judgment.
The use of MCQs is valid both for the verifying the acquisition of cognitive skills, interpretative skills, and clinical skills, where candidates are asked to identify the correct answer in a predetermined set of questions (cut-off) .
Questions to evaluate interpretative skills can be used in any macro area of professional knowledge. The ability to interpret can be applied - and assessed - in different contexts. In the meanwhile, also the ability to interpret clinical cases for the evaluation of care plans can be assessed. The structure of the test is the same in all cases.

Constructing effective MCQ tests and items requires scrupulous care in the design, review and validation stages. Creating high quality multiple-choice questions requires a very deep experience, knowledge and large amount of time. MCQs are a good basic tool in assessing knowledge and reasoning, but, for a full judgment of the overall skills of professionals, they can be only the starting point. A good healthcare professional has to know, to know how to be and how to do it.

How to construct a MCQ?

Elements of a multiple-choice question:
- Stem-presents the clinical problem and question;
- Options;
- Rationale.

1. Writing the question or unfinished statement:
- The question should be written in the simplest, clearest and unambiguous way, to avoid confusion.
- The question should be meaningful without having to read all the options first.
- Put as much of the necessary wording as possible in the question, rather than in the alternatives.
- Watch for redundant words in the alternatives.
- The stem of the multiple choice question should be free of irrelevant material.
- Where possible, state the stem in positive rather than negative terms. The use of negatives can confuse students and lead to sentences that are difficult to interpret. If negatives can't be avoided, highlight the negative in the stem of the question (e.g. in italics). In particular, avoid double negatives.
- Have the test reviewed by someone who can find mistakes, clues, grammar and punctuation problems before you administer the exam to students.
- Give clear instructions.
- Use only a single, clearly-defined problem and include the main idea in the question.

2. Writing the incorrect answer options (the distractors):
- Don't include responses that are obviously wrong.
- The alternatives should be plausible and attractive to the uninformed.
- Statements based on common student errors and misconceptions often make strong distractors.
- True statements that do not answer the question often make good distractors.
- Absolute statements (e.g. 'never', 'always', 'all') are best avoided as students will rule them out.
- Keep the distractors sufficiently different to the key (correct) response in substance, and not just clever or subtle wording.
- Ensure that the alternatives are independent and mutually exclusive.
- Avoid absurd, jokey and idiosyncratic distractors – they are easily spotted.
- Make each distractor grammatically similar to the correct response.
- Avoid using the alternative 'all the above' and use 'none of the above' with caution.
- 'All of the above' makes it possible to answer the question on the basis of partial information – if there is only one correct answer, and a student notes that two alternatives are correct, 'All the above' must be the answer.
- Similarly, a student can detect 'All the above' as a wrong answer if he/she recognises another alternative as incorrect.

- ☐ 'None of the above'—when used as the right answer in a correct answer type item—tends to measure nothing more than the ability to detect wrong answers (with no guarantee that a student knows a correct response to the question).
- ☐ Present the responses in a logical (e.g. numerical) order if one exists.
- ☐ Avoid giving clues to the answers of other test questions either in the alternatives provided or in the stem.

3. Writing the correct response:
   - ☐ Correct responses don't necessarily have to be absolute truths – students can be asked to select the best answer or the one 'which is most likely'.
   - ☐ Avoid giving a clue by having the correct response noticeably different in terms of either: length; grammar/syntax being more highly qualified than the distractors; being the only one to match the stem in the number of factors required.
   - ☐ Balance the placement of the correct answer: correct answers are usually the second and third option

4. Rationale:
   - ☐ Providing a rationale enables questions to be used as a learning tool.
   - ☐ Please explain why the distractors are incorrect, as well as why the correct option is correct.
   - ☐ Explanations should be thorough, but no longer than 100 words.

CONSTRUCTED RESPONSE ASSESSMENT (ESSAY) (EdCan, 2009)

Constructed response assessments are typically characterised by lengthy responses to questions posed and are most commonly referred to as essays.
Essays can be used to require learners to:
- ☐ analyse and/or integrate different ideas or points of view
- ☐ contrast or compare theories or ideas • develop a logical argument
- ☐ evaluate views or ideas
- ☐ demonstrate creativity
- ☐ apply what has been learnt in real life situations
- ☐ substantiate their own views.

According to Banks, S. R. (2005) two types of Essay questions can be identified:
1. Restricted response essay: in this type, both content and response as indicated within the question are limited. The restricted response essay addresses a limited sample of the curriculum or learning outcomes. The restricted response essay may commonly be known as:
   a. Problem solving exercises: focus on solving a problem and decision making processes. In nursing contexts, clinical data is presented and the learner must demonstrate their ability to assess, analyse, plan, implement and evaluate (Cherry & Jacob, 2002).
   b. Case studies: the case study is used to bring a reality perspective into the classroom. They are usually proposed in form of a narrative and are usually developed by the lecturer (McFetridge & Deeny, 2004), they present some key elements of a clinical situation resembling real-life scenarios and the learner must combine these elements with information acquired from previous educational experiences. Basing on additional resources, the learner works through a sequence of increasingly complex activities.

    c. Other examples include scenario-based activities or context-dependent item sets. These methods share many similarities and are considered helpful in developing critical thinking skills and in applying nursing knowledge to practice

2. <u>Extended response essay</u>: can be considered a form of performance assessment or complex achievement. These kinds of essays ask the learner to answer to a question and assess the ability to research a topic, creatively organise, integrate and evaluate ideas, and construct an argument (Linn, & Miller, 2005). An extended response essay normally includes the following subsections: ·

    a. an introduction ·
    b. the body of essay ·
    c. a conclusion ·
    d. reference list ·
    e. appendices.

Assignments or reports can be considered extensions of the Extended response essay and are suitable for communicating the results of research and analysis of data and of issues. Reports can cover a wide range of topics, but usually focus on transmitting information with a clear purpose, to a specific audience.

Main strengths of Constructed Response assessment

Constructed response assessment has been used in the field of nursing for decades (Brennan, 1995). If carefully constructed, essay questions may measure complex learning outcomes or attributes that cannot be measured by other means such as motivation, attitudes towards change, and reflection on development (Griffin, 1996). Essays emphasise the integration of thinking and problem solving and enable the evaluation of writing skills, information literacy and critical analysis skills (Linn, & Miller, 2005). Moreover, essays provide valid assessment of how well learners can summarise, find relationships between data and apply known procedures to new situations (Schuwirth & van der Vleuten, 2003).

Essays closely emulate writing tasks within the field of nursing, such as documentation in patient histories, the use of scientific conventions, conformity to journal styles, preparation of ethic applications, research proposals and abstracts.

Limits of Constructed Response assessment

From the teacher point of view, developing effective essay questions (in particular as to case studies) and evaluate students contributions can be time consuming and brings some complications in terms of assessment criteria or marks.

A lot of factors may influence the evaluation, such as the writing style, the grammar correctness, the teacher's fatigue. Similarly, providing a formative feedback could be demanding.

Moreover, as learners become more experienced or aware of educator/ trainer expectations, the learner becomes better able to match these expectations therefore the essay may reflect awareness of conventions and norms of essay writing rather than understanding of content or critical thinking skills (Brennan, 1995).

How to set up a Constructed response assessment (EdCan, 2009)

1) Essay questions should measure the achievement of clearly defined learning objectives.
2) Careful attention should be given to the design of essay questions so that the learner is left in no doubt as to what is being asked.
3) Restricted response questions will be easier to assess objectively, otherwise include word limits or other parameters to focus the question.

4) Define what constitutes a satisfactory answer before administering an essay question.
5) Decide how to manage distracting factors that may contribute to subjective scoring: i.e. presentation, spelling and organisation and inform the learners of any penalties that apply
6) Devise scoring criteria and distribute along with essay question

7.1.3.2   Oral Exam [OE]

THE "TRIPLE JUMP" EXAMINATION
The structured oral examination or triple jump, which is a type of individual oral examination, is called in this way because it is divided into three parts and is used to assess the ability to identify the problem, and to formulate the explanatory and resolutive hypotheses of the problem.
This methodological process requires clinical tutors to plan training: within training ample space is devoted to the student's understanding of the importance that the discussion of a real case can have, related to an emotionally-involved person, to be able to identify the elements for a care plan (identified problems, goals to achieve, interventions to implement, evaluations to perform), and to be able to apply them to the patient.
From a methodological point of view, great rigor is required.
The important role as facilitator is played by the tutor, who within the group leads the students to explore the problem, to deepen it, and to use their knowledge on the field to seek solutions. The cases used in the sessions must be prototypes of the problems treated and "real" (drawn from a clinical context where the student is carrying out his learning experience). The case is constructed by the student together with the clinical tutor and enables the student to have an important training experience already in the construction phase of the text as it requires the ability to:
-   focus on a typical healthcare problem with related to the student's educational goals;
-   to design a case including a description and additional data;
-   contextualize the problems included in the case, directing them towards the educational objectives of the students.
The rational for the use of triple-jump examination is that this methodology places responsibility for learning on the student, encourages development of problem-solving and critical thinking skills along with the knowledge acquisition, and allows an assessment needs to match the curriculum.

How to construct a Triple-Jump examination?
1.   Written a case protocol:
   ☐ The case protocol needs to be realistic.
   ☐ The case protocol must include all essential information, needed by the students for specific objectives (detailed above).
   ☐ Cases need to be standardized to the extent possible (i.e. same length, same format - page one introduces patient, page two introduces medications and medical/social history, page three reveals diagnosis).
   ☐ The student, in the presence of the tutor, reads through the case and present an oral review and analysis of the case including:
      - Hypothesis generation;
      - Acquisition and interpretation of the clinical evidence presented in the case;
      - Initial exploration of underlying mechanisms.

2.   Independent research:
- ☐ The student explores existing knowledge (on academic material), and goes in deep in the case.
- ☐ The student spends time in independently searching out relevant information and in further problem analysis.
- ☐ Enables an assessment of the degree to which the student be efficient and effective as a self-directed learner.

3.   Synthesis - in the presence of the assessor the student:
- ☐ Describes the information search;
- ☐ Explains how research priorities were set;
- ☐ Identifies the resources used;
- ☐ Presents a final analysis of the problem;
- ☐ Relates new knowledge obtained;
- ☐ Explains how this new knowledge relates to the student's understanding of the problem;
- ☐ Perform a brief self-assessment.

7.1.3.3   Simulation/skills demonstration [SSK]

THE OBJECTIVE STRUCTURED CLINICAL EXAMINATION (OSCE)

OSCE is a structured exam that allows to assess specific competences/skills developed by the student as a whole during clinical placements. Therefore, the exam is conducted at the end of these experiences and at the end of each year of the course. The OSCE exam ensures the certification of the competences developed by the student in each year of the course based on the clinical learning aims. The OSCE is an approach for the assessment of students in which aspects of clinical competence are assessed in a comprehensive, coherent and structured way, with particular attention to the objectivity of the process that reduced the risk of prejudice and discrimination from part of the evaluators.

OSCE is an assessment method structured in consecutive stages (also called 'stations'), in which the students interview, examine and treat standardized patients (SP) who present with some type of medical problem. When standardized patients (SPs) are utilized in OSCE exams, the linear sequence of the multiple station and skill challenges bears remarkable similarity to that real environment.

In each station the student is assessed for a specific competence (for example, on a procedure). The stations have a predefined duration and can be:
- Clinical, that is, to identify and decide on the patient's problems;
- Gestural (procedural), that is, perform procedures safely for the patient and for the professional;
- Relational, that is, to communicate effectively through verbal and non-verbal strategies to help the patient in understanding / solving the problem.
- Communication skills are verbal and non-verbal words, phrases, voice tones, facial expressions, gestures, and body language that you use in the interaction between you and another person:
- Verbal communication is the ability to explain and present your ideas in clear language, to diverse audiences. This includes the ability to tailor your delivery to a given audience, using appropriate styles and approaches, and an understanding of the importance of non-verbal cues in oral communication. Oral communication requires the background skills of presenting, audience awareness, critical listening and body language.

- Non-verbal communication is the ability to enhance the expression of ideas and concepts without the use of coherent labels, through the use of body language, gestures, facial expressions and tone of voice, and also the use of pictures, icons, and symbols. Non-verbal communication requires background skills such as audience awareness, personal presentation and body language.
- Effective communication is an essential part of building and maintaining good physician-patient and physician-colleague relationships.

These skills help people to understand and learn from each other, develop alternate perspectives, and meet each other's needs.
- Communication skills in a healthcare setting include the way you use to:
- Explaining diagnosis, investigation and treatment.
- Involving the patient in the decision-making.
- Communicating with relatives.
- Communicating with other health care professionals.
- Breaking bad news.
- Seeking informed consent/clarification for an invasive procedure or obtaining consent for a post-mortem.
- Dealing with anxious patients or relatives.
- Giving instructions on discharge.
- Giving advice on lifestyle, health promotion or risk factors.

The selection of the stations and the competences/skills to be assessed in each one, is done on the basis of the clinical placement objectives of the year of the course. Students of the same year are exposed to standardized tests and tested with the same pre-defined assessment criteria in grids or checklists. Each station therefore includes:

- a specific setting (real or simulated);
- paper or computerized documentation necessary to understand the task to perform (the student will find written instructions that require careful reading);
- aids/materials necessary for carrying out the task;
- if necessary, a simulator (person trained on with predefined script);
- evaluators.
- The exam is conducted by specifically-prepared tutors/evaluators

Features of the Objective Structured Clinical Examination (OSCEs)
- Stations are short,
- Stations are numerous
- Stations are highly focused, candidates are given very specific instructions
- A pre-set structured mark scheme is used hence…
- Reduced examiner input and discretion

Emphasis on:
- What candidates can do rather than what they know
- The application of knowledge rather than the recall of knowledge
- Characteristics:
- 5 minutes most common (3-20 minutes)
- (minimum) 18-20 stations/2 hours for adequate reliability
- Written answer sheets or observer assessed using checklists
- Mix of station types/competences tested
- Examination hall is a hospital ward
- Atmosphere active and busy

Additional options…
- Double or triple length stations

- Linked stations
- Preparatory stations
- "Must pass" stations
- Rest stations

How is the OSCEs done? Instructions for students.
Although OSCEs are performed in many settings in regard to the exam purpose, the organizing institution, and available facilities, they all share similar procedures. On the examination day, the student will go through the following steps in sequence:
1. Registration:
   - Show your identification badge.
   - Be reminded about the exam rules.
   - Be checked for things which are allowed and other not allowed things.
2. Orientation:
   - Exam format, procedures and policies will be reviewed.
   - Instructed about your starting station and how to proceed.
   - Your questions will be answered (and not allowed beyond this step).
3. Escorting to exam position:
   You will be escorted to his/her station.
   - You will stop by the assigned room door until a long bell/buzzer announces the start of the exam.
4. Station Instruction Time:
   - This is one or two minutes to read the instruction about this station situation, patient, and required tasks. Read carefully. At the next bell/buzzer enter the room.
5. The Encounter:
   - Start your encounter with the SP. This is a 5-20 minutes encounter. Perform the required tasks. Stop at the next bell / buzzer.
6. Post Encounter Period:
   - There are some differences here. Some OSCEs will have no post encounter periods. Some will have one or two minutes of the encounter period assigned to an oral question asked by the examiner inside the exam room. No more communication is allowed with the SP. Others have written questions to be answered on paper or computer outside the exam room for 5-10 minutes. At the next long bell / buzzer, the first station ended as well as the next station has started. You have to proceed to the next station quickly as it is the same long bell / buzzer at step 4.
7. Repeat Steps 4 to 6:
   - Steps 4 to 6 will be repeated until you have been in all the stations. Some OSCEs will offer one or two short rest periods.
8. Exam ended / Escorting to dismissal area:
   - You will be escorted back to the dismissal area for signing out. You will be asked to handle back all what you had received on signing in, the ID badge, remaining stickers, all the papers, and the pencil. You may also be asked to stay without outside contacts for some time (sometimes hours) for exam security reasons.

CHECKLISTS
Checklists are assessment tools that set out specific criteria, which educators and students may use to gauge skill development or progress. Checklists are a simple but powerful way to improve individual and group performance. They are declarations of standards that ensure that important tasks are completed.

By routinizing certain procedures, checklists ensure that higher-order mental processes are available for complex, non-routine events, which is why they are regularly used by surgeons and airplane pilots, as well as by those engaged in other demanding occupations. Checklists are tools that state specific criteria and allow teachers and students to gather information and to make judgements about what students know and can do in relation to the outcomes. They offer systematic ways of collecting data about specific behaviours, knowledge and skills. Checklists usually offer a yes/no format in relation to student demonstration of specific criteria. This is similar to a light switch; the light is either on or off. They may be used to record observations of an individual, a group or a whole class.

The construction of the checklist is a very important stage for the facilitator along the educational pathway; it takes place in small groups (6-12 students), where a tutor facilitates discussion based on the observation of a simulated healthcare technique.
The laboratory then begins with the simulation on a "professional technique".
During the simulation, the group observes silently and takes notes.
At the end of the simulation the tutor prompts the group to reflect by going through the various steps of the procedure. At each step, the group is prompted to understand: "Why did they do in this way?".
All the motivations are agreed with the group and summarized on a flipchart, which becomes the historical memory of the construction of the instrument.
The constructed checklist is used for clinical learning as a learning / assessment tool. The same tool can be used for an assessment.

7.1.3.4   Assessment of WBL [A-WBL]

CLINICAL REASONING

The clinical reasoning session represents an organizational aspect of the clinical learning experience that facilitates the development of problem-solving skills in real environments. This mode requires data collection on the real case through:
- case identification in terms of significance of welfare problems;
- definition of descriptive data
- definition of additional data.

The during the session, the clinical tutor facilitates group discussion on the presented case.
The participants are the students who are doing their clinical placements in the areas of care related to the type of case presented.
The cases used in the clinical reasoning sessions are real cases, experienced by the student in a clinical setting, on which it is useful to have an in-depth discussion.

The discussion of the real case involves the use of the Kassirer method.
There is a single session, at the end of which the group is able to provide the solution to the problem in terms of planning healthcare interventions from a multi-professional perspective.
Clinical reasoning, when training of health professionals, enables to obtain concrete results on clinical problem-solving skills, which traditional educational methods do not offer.
Since integrated care planning is an important objective to be pursued to assess the specific intervention of each professional on the patient, it is evident that it is necessary to act on the training systems, in order to clearly define the healthcare

objectives, the integrated planning of healthcare and expertise in solving complex healthcare problems.

STUDENT DIARY

Is a useful tool both for teachers and students. Compiling a diary related to their experience, students are pushed to reflect on their experience. Reflection is a metacognitive process in which professionals and students actively and purposefully consider their feelings, reactions, thoughts, beliefs, knowledge, responses, and experiences (Dewey, 1993). The reflection process enables learners to revisit and analyse their experiences and develop new knowledge, approaches, skills, ways of thinking, and attitudes (Burton, 2000).

Research in the field of social work, highlights that writing a diary encourages students in higher education, to critically analyse course content (Swindell & Watson, 2006). It also encourages students to take greater responsibility for learning, as well as helping to stimulate self-awareness and cultural sensitivity (Boud, 2001).

Students' diaries may represent a tool for teachers' formative assessment

7.1.3.5   Assessment based on other data [OTH]

This last category refers to the methods related to the assessment of learning activities carried out on the on the Open Online tool.

The Open Online Tool will be endowed with functionalities that allow the teacher adopting already explored assessment methods like, for example, written assignments. Some other data are the result of specific on line activities and can be collected exclusively through the platform

Learning analytics: the platform will be endowed of functionalities that allow to collect, analyse and report data about learners and their activities on the platform so to understand their level of commitment in the single parts and in the course as a whole

E-portfolio: generally speaking, is a collection of digital course-related artefacts, collected and managed by the learner in different forms (essays, posters, photographs, videos); e-Portfolios can also capture other aspects of the learner's life, such as volunteer experiences, employment history, extracurricular activities, and more. A good e-Portfolio is also a source of reflection for the learner about the learning process. In the case of Enhance, the portfolio will include also data about the learners' participation in collaborative activities carried out through chat, forums, etc. The platform will be endowed with facilities that allow the learner to export their work to an external portfolio. For example, learner work might include forum posts or assignment submissions that they believe demonstrates their knowledge.

8. Personalization and individualization of the learning path for FCN VET

8.1 Theoretical background and current situation

Within the rapidly changing educational, vocational and leisure settings of our society, personalised learning is a potential approach to meeting educational needs and may provide new alternatives that foster learning capacity of individual learners (Bentley and Miller, 2004; Järvelä, 2006). Nonetheless, it is widely recognized that often teachers face difficulties in meeting the needs of each learner: although each learner has got her own characteristics, learning style, as well as specific backgrounds and past experiences, most of the times it is unavoidable that teaching takes a "one size fits all" approach, as personalization is often prohibitively expensive especially in typical face-to-face contexts (De Bra, Kay & Weibelzahl, 2009).

Thus, the research fields on 'personalization' and 'individualization' (the former concept being more focused on the ability of a learning environment to offer an ad hoc learning path to a certain learner according to her/his individual characteristics; the latter being devoted to the possibility of the learner to personally choose a certain path (Clarke, 2003) are both quite active and aimed to find innovative solutions to the problem of making the learning environment more responding to the single learner's needs and reflecting her profile.

Moreover, recently these research threads have witnessed a renewed attention as "*Over the past 15 to 20 years, with the growing popularity of personal computing, a variety of methods and techniques have been developed to tailor learning content, instruction, or system behavior to the knowledge, needs, preferences, or goals of individual learners or groups of learners. These range from manual personalization techniques to artificial intelligence methods that reason about the learner. Such personalization and adaptivity have great potential for improving the user experience in technology-enhanced learning.*" (De Bra, Kay, & Weibelzahl, 2009).

As a consequence, within the Technology Enhanced Learning (TEL) research field, the problem of how to incorporate individual differences in the learning design (Jonassen & Grabowski, 1993; Pozzi, 2010) is being addressed from very different perspectives, ranging from the psychological point of view (Anastasi & Foley, 1949; Eysenck & Eysenck, 1985; Merrill, 2001), to more technological perspectives, aimed at finding new technical solutions to meet individual styles and behaviors, ranging from Artificial Intelligence, Intelligent Tutoring Systems, User Modeling to Adaptive Hypermedia/Web-based Systems (Brusilovsky, & Peylo, 2003; De Bra, Kay, & Weibelzahl, 2009).

Independently on the different directions taken by research, there is a common idea underpinning the field, that is that (technology-enhanced) learning should not coincide with fixed, pre-determined contents to be equally distributed to all learners independently of their individual characteristics, but rather that learning objectives, contents and the way they are presented should evolve during the learning experience, on the basis of the learner's styles, attitudes and behaviors (O'Connor, 1997; Henze et al., 2004; Lee, 2004). The UMAP 2015 Conference had the theme "Contextualizing the World", highlighting the significance and impact of user modeling and adaptive technologies on a large number of everyday application areas such as: intelligent learning environments, recommender systems, eCommerce, advertising, personalized information retrieval and access, digital humanities, eGovernment, cultural heritage, and personalized health (Ricci, Bontcheva, Conlan, & Lawless, 2015).

If personalization is thus recognized as an imperative of education in general, when we come to the specific sectors of vocational training and professional development, it becomes even more important: in these contexts, you definitely need to take into account the learner's prior experience and knowledge, her current interests and attitudes, as well as her needs in terms of constraints, especially if she is working. Again in these contexts, technology may represent an interesting solution, as it allows more learner-centered approaches to learning and individualized learning paths.

Coming to the specific sectors of nursing education and FCN training in particular, by analysing the available curricula (collected under WP2) we can see that personalization in these contexts is very limitedly applied.

This might include the following options for the learner:

- taking elective or optional courses/ units/ modules aside the core, basic ones (Portugal, Sweden, Finland, Greece, Norway, Italy, Cyprus, Slovenia) at the learner's own choice

- varying (a bit) the course order (Sweden)

- skipping courses by being recognized prior learning or experience (Portugal)

- choosing the area of the internship, according to learner's personal interests and attitudes (Belgium, Finland, Spain)

- choosing the area of the thesis project, according to learner's personal interests and attitudes (Norway, Finland)

- choosing part-time or full-time programmes or being allowed to extend the overall programme duration (Belgium, U.K.)

- being allowed to take online or blended courses /programmes (U.K., Sweden).

Overall, we can state that – while individualization of the leaning path is somehow possible, at least in some countries where learners can at least partially pick up some of the courses from a bigger set - personalization seems far from being applied in the current European FCN training initiatives and programmes. Of course, the analysis of the curricula that has been conducted, is not exhaustive and it might be that sporadic situations exist, where personalization is pursued. Still we think there is room for improvement and possibility to exploit technologies in a more effective way.

8.2 Possible future directions to support personalization in FCN training

Taking into account the above mentioned limitations as far as personalization of the FCN training initiatives and considering the work conducted under WP2 in terms of FCN's needs and profile, in the following you can find a number of preliminary suggestions for possible future research threads/directions that could be investigated and experimented.

✓ Taking advantage of e-learning and/or blended learning to guarantee flexibility to learners that could define their own learning objectives and access materials and courses at their own pace and availability. This would require to train teachers of the FCN courses to effectively (re-)design their courses. Moreover, learners would need support in terms of self-regulation as their autonomy, activeness and adaptiveness cannot be given for granted (Jarvela, 2006).

✓ Providing multi-modal contents to meet different learning styles. This calls again for teachers' training actions and can turn out to be expensive in terms of time required to design new materials. In this sense, initiatives aimed - on the one hand - to foster teachers' sharing and – on the other – to the creation of databases for materials oriented to FCN education are advisable.

✓ Designing and putting in place modalities to recognize learner's prior learning and experience (as it already happens in a few countries) in such a way that the resulting delivered learning path is adequately individualized.

✓ Providing systems able to valorize the single learner's experience through sharing and peer discussion (Jarvela, 2006).

✓ Providing learning activities (both individual and collaborative) that are meaningful and relevant to learners, driven by their interests and often self-initiated.

✓ Providing 'adaptive' or 'intelligent' systems featured with learning analytics and recommending functionalities, in such a way that learners are proposed courses and materials depending on their previous learning outcomes.

9. Recognition of Prior Learning (RPL) and Personalization of Learning Paths - Guideline for VET Providers

> **N.B.:** "You" in this manual means: the persons/department responsible for RPL in your institution.
>
> There are already a lot of manuals and guidelines on how to recognize prior learning (RPL). This manual is strongly based on two very helpful, hands on documents, and the information provided there has been adjusted for ENhANCE's purposes:
>
> - Guideline "EMPLOYABILITY_PORTFOLIO_TOOL_6 - RPL- RATIONALE AND GUIDELINES" developed within the Erasmus+ project "Intergenerational Learning Partnership Over 55" (ILPO55, 2017), available at **https://www.ilpo55.eu/it/ilpo55_activities06.aspx**
>
> - Guideline: "Recognition of Prior Learning (RPL). Learning Package." by the Internaional Labour Office (2018), available at **https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_626246.pdf**
>
> - Gudeline "European guidelines for validating non-formal and informal learning" (Cedefop 2015), 2nd edition, available at **http://www.cedefop.europa.eu/en/publications-and-resources/publications/3073**

What is RPL?

Recognition of Prior Learning (RPL) – often also referred to Validation of Prior Learning – is a process by which the prior learning of an individual, gained in formal, informal or non-formal settings (for definitions, see Duvekot & Halba, 2014; International Labour Office, 2018), is validated against a number of set criteria and assigned credit value (ILPO 55, 1). Such credit, obtained through RPL, may

a. grant access/entry to specific programmes of study and/or;

b. be used to claim achievement of parts of a qualification.

The RPL process can be a lengthy process, which requires complete dedication and commitment by:

- the applicant - in order to submit the information required and to answer any clarifications requested by the organisation, and;

- the organisation – in order to verify the authenticity of the elements within the applicant's claim and to provide the necessary guidance to the applicant throughout the process.

As a result of the RPL process, learners together with the institution may create personal/individual learning paths because the common elements of a different study programme they previously attended can be easily transferred to the one they are applying for. Similarly, other forms of learning obtained through different life experiences, working environments, work based learning, and training courses etc. may equip the individual with a set of knowledge, skills and competences, which are relevant to the said qualification. Recognition of Prior Learning is therefore a tool for

validating the skills that an individual possesses and transforming them in tangible credit, which s/he can apply to facilitate the progression of his or her studies.
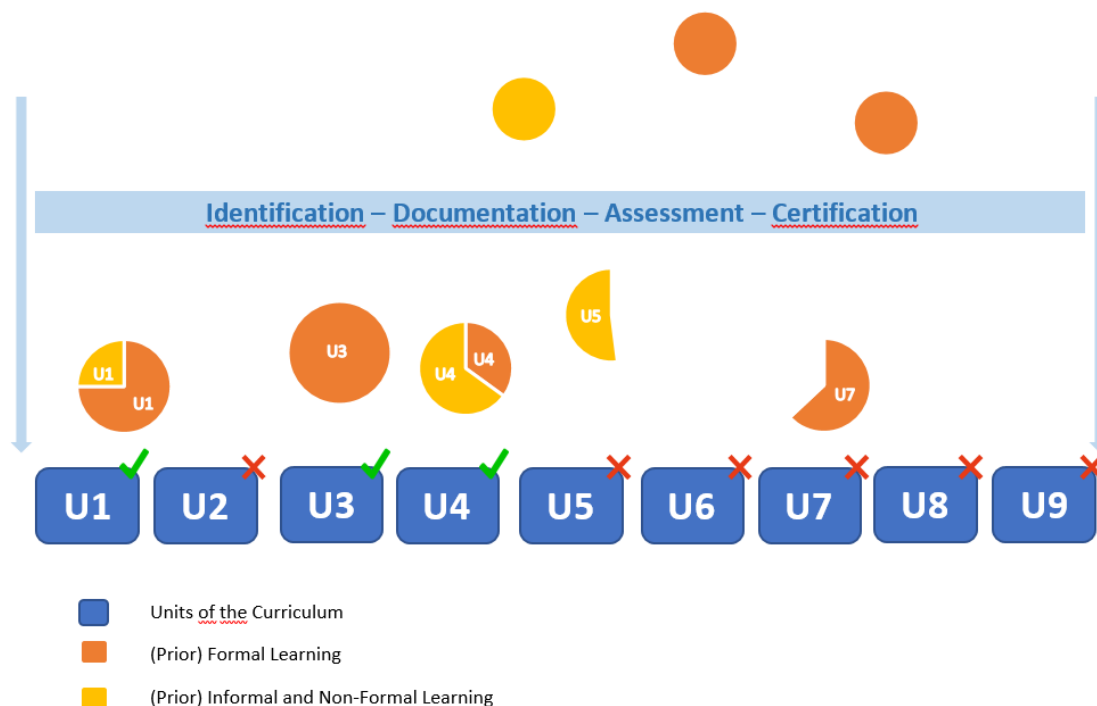

Figure 11: Model of Validation of Prior Learning

Why is RPL useful?

RPL supports Lifelong Learning through (ILPO, 3):

- *Permeability*: RPL may provide an opportunity to individuals to follow programmes, which otherwise they would not have had access to.
- *Accessibility*: Opportunity to reduce the time needed to complete a programme by marking specific Unit/ Modules as obtained through RPL. This is mostly relevant to individuals in employment, whose time is therefore limited and cannot follow full-time education.
- *Mobility*: RPL facilitates the mobility of workers in Europe, as they will be able to have their prior learning count towards an additional education or employment in another country.

Support Lifelong Learning

The ENhANCE Curriculum – The Foundation for Applying RPL

The curriculum that will be instantiated in your institution is based on the FCN EU Curriculum that fulfils the requirements to support RPL.

- It matches the occupational standards[23] and is based on learning outcomes - meaning, it is competence-based and provides transparent descriptions of

---

[23] The occupational profile was developed in line with existing curricula for family and community nurses as well as the ESCO classification for Nursing Professionals.

what a learner knows and is able to do upon completion of the learning process.

- It informs about the assessment of these learning outcomes (criteria, indicators, assessment procedures): This will help you to compare the prior learning of an applicant to which competences FCNs will have after completion of your curriculum and what to look for when examining the documentation of prior learning ($\rightarrow$ Evidence) provided by applicants.

Main elements of the RPL process

The following guideline only applies if there is an RPL system established in your country (and in your institution). **Checking this should be the very first step (STAGE 0).**

You can do this in the Country Reports of the Cedefop (European Centre for the Development of Vocational Training) at:

http://www.cedefop.europa.eu/en/events-and-projects/projects/validation-non-formal-and-informal-learning/european-inventory

European Country Profiles have also been developed in the European VINCE project: https://vince.eucen.eu/validation-in-europe/
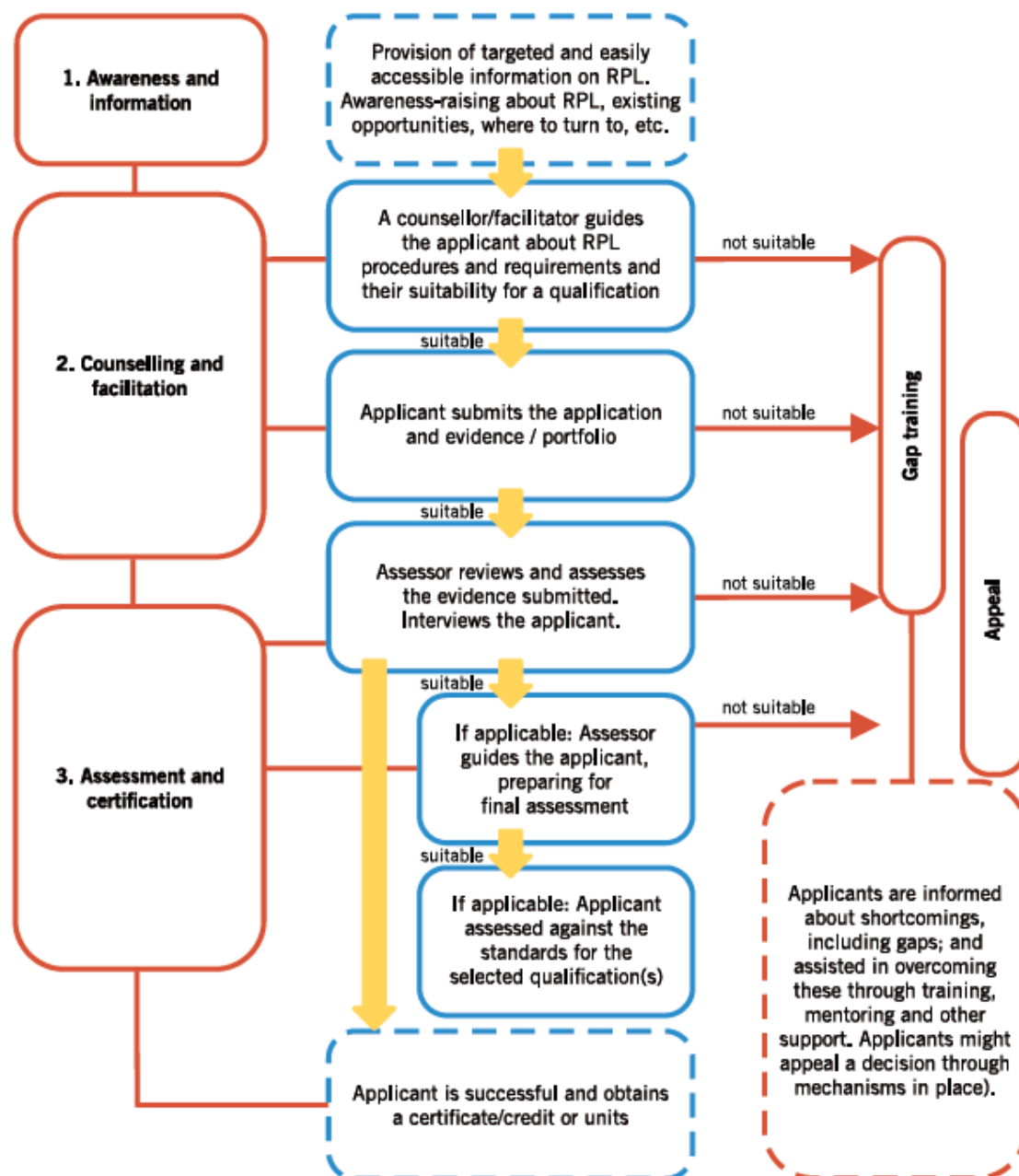
Figure 12: RPL process – generic flowchart (ILO 2018, 14)

As you can see in the flowchart (see Figure 12), there are three main stages in the process (ILO 2018, 14f.):

STAGE 1: Awareness and information:

- Potential applicants and all other stakeholders involved in RPL are aware of the existing RPL system, related requirements, and steps to take.

STAGE 2: Counselling and facilitation:

- Counselling and guidance is available to provide potential applicants with

more detailed information about the RPL process, evidence that needs to be provided, etc.

- Counsellors/facilitators perform an initial assessment (pre-screening) of applicants and support them in preparing their portfolios (evidence) and offer guidance on skills gap training, if needed

STAGE 3: Assessment and Certification:

- Assessor reviews the evidence/portfolio submitted

- If applicable, the applicant might be prepared for a final assessment, test or demonstration against existing qualification standards to receive the certification/units/credits

- Final assessment (e.g. test or demonstration)

- Decision on the final assessment and information on shortcomings, if applicable (and potential re-skilling, mentoring etc. for another assessment)

- Award of qualification/certificate/credits/units/exemptions

RPL Procedures – Concrete Steps During the Three Stages

N.B.: The legal basis for RPL in Regulated Professions such as Nursing is provided by the European Parliament and needs to be taken into account:

- Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications:

  https://eur-lex.europa.eu/eli/dir/2005/36/oj

- Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC:

  https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32013L0055

- In line with the Directive 55, a database for regulated professions has been created that provides information on access, qualifications, regulatory bodies etc. of nursing professions:

  http://ec.europa.eu/growth/tools-databases/regprof/index.cfm?action=homepage

In the following table the main steps characterizing the above described stages are detailed.

STEP 0 - Checking Prerequisites and conditions

As stated, the following process applies if there is an RPL system in place in your country and in your institution.

For more information on *how to build* an RPL system, see ILO 2018, Units 2-6.

RPL systems vary vastly (as you can see in the examples given in "17Annex 6: Country examples for RPL procedures") However, according to ILPO55 there are some common features, which include:

STEP 1 - Initial Enquiry/Call for application

The RPL process starts with an initial enquiry by

1. either from a prospective RPL candidate to your institution or;
2. in the form of a Call for applications by the specific organization.

At this point, the first contact between RPL applicants and your organization is established. As you can see in the flowchart, a support and information system regarding RPL should be in place to guide prospective applicants in the application for RPL consideration.

STEP 2 - Confirmation of Eligibility

After the application, the applicant needs to be informed by your organization whether they

1. are eligible for RPL on multiple qualifications including the one s/he applied for;
2. are eligible for RPL on qualifications other than the one s/he applied for;
3. are not be eligible for RPL.

Once again, the role of your guidance is vital in this section in order to help the applicant make an informed choice regarding their future educational pathway in your institution.

STEP 3 - Portfolio/Repository of Qualifications / Certifications

As stated above, RPL claims are built upon the Prior Learning of an individual. This learning can obtained either **formally**, **informally** or **non-formally**.

These types of learning are defined as follows:

- **Formal Learning**: Formal learning is organized learning, achieved in formal education. It is built upon a structured curriculum, delivered by qualified teachers and leads to a formal certificate which is, most of the time, recognized by multiple organizations both locally and internationally. It is usually valued in terms of credits, which can be transferred between qualifications, institutions and countries.

- **Non-Formal Learning:** Is the type of learning which occurs outside of compulsory education, for example continuing professional education. It can be either organized or not, is intentional and it is usually flexible, hands-on, learner-centered and led by a teacher or a leader. This form of learning does usually not result in a formal degree or certificate.
- **Informal Learning**: Is the learning obtained in everyday life, often from persons with more experience in a certain area without the role of a qualified teacher (parents, friends, etc.). There is no set curriculum and no credits. This form of learning is gradual, passive and accumulated through time.

In order to prove the RPL claim, the applicant will have to provide evidence of his/her qualifications and prior learning experiences. A **portfolio of competences** – a more detailed extension to the CV - is usually ideal for this.

STEP 4 - Submission of Evidence

In this phase, you will take a look at the evidence provided by the applicant and select the evidence **relevant for the RPL claim**. Not all Prior Learning will be relevant to every RPL claim. You will need to select and determine which experiences are best suited as evidence for the RPL being claimed. Most institutions will offer guidance to applicants in the process of building and presenting their evidence (Stage 2).

Evidence for an RPL claim needs to be:

- **Valid** – All evidence submitted by an applicant must be **related to the content of the Unit or qualification being claimed by RPL**.

- **Authentic**: All evidence submitted by an applicant should **clearly relate to his/her own effort and achievements**. They should ideally also bear clear information on the level and/or the breakdown of the course followed.

- **Current**: the **date in which the presented evidence was obtained** is important to determine its relevance towards the RPL claim. In the case of formal certification the date in which it was obtained is the most relevant detail for demonstrating currency. For non-formal and/or informal evidence, the applicant would need to find other ways to demonstrate the currency (e.g. the number of years in which the activity was performed and when it was performed last.)

- **Sufficient** – It is important that any evidence submitted **covers most if not all of the aspects** related to the RPL claim. Therefore, if an applicant is making a claim to achieve a specific unit by RPL, any evidence submitted needs to cover all or a majority of the criteria related to the said unit.

Evidence for RPL can take different forms. It can consist of a combination of documents, multimedia files (photos and videos) and tangible artefacts (although these are the least popular). Once again, organizations will guide applicants on what is acceptable as evidence and what is not. The most common form of evidence is documents, and there are various types, which can be presented.

STAGE 3

STAGE 3

Some examples of evidence are:

- Resume/CV (paper and/or online);

- Covering letter/s;

- Formal Education Certificates;

- On the job training Certificates; CPD Certificates;

- Reference Letters from current and past: employers, peers, supervisors, clients etc.;

- Performance Appraisals, Evaluation forms, letters or appreciation; letters of recommendation;

- Performance Awards;

- Samples of Work Performed: Memos; Reports; Plans; Procedures and Forms; Hand-outs; Marketing plans etc.;

- Photographs and/or videos showing work produced by the applicant and/or the applicant at work;

- Minutes of meetings featuring work/tasks;

- Email communications etc.

Evidence in the Portfolio should be accompanied by the applicants own self-reflection, and thoughts in order to prove his/her strengths and map/explain the relevance of the evidence being presented towards the RPL claim. Such explanation will facilitate the work of the assessor/evaluator when evaluating the documents submitted and will ensure that the evidence is interpreted as intended.

STEP 5 - Verification and assessment of Evidence and RPL Claim

All evidence submitted by applicants will be reviewed by you (= the representative of your institution dealing with RPL), and assessed against the criteria of the Unit of Learning Outcomes of the FCN Curriculum the claim is made for. You will also review the application and the individual descriptions submitted by the applicant claiming Prior Learning on specific tasks, and will decide whether in your professional opinion, the applicants' claim can be considered as valid or not.

I order to provide a fairer evaluation to the applicant, some organisations might appoint multiple evaluators and/or a board of Evaluators in order to review the same RPL application. The evaluation board may contact the applicant for clarifications. In some cases, they may also decide to put the applicant to the test, asking him/her to perform specific tasks in order to assess his/her skills and competencies.

In ENhANCE the collection of prior learning evidences could be carried out within the Open Online Tool (OOT) that will be developed and provided to VET institutions offering the FCN qualification.

STAGE 3

STEP 6 - Award of certification/Credit (leading to Personalization of Learning Paths)

The final Step of the RPL process is the award of a qualification (fully or partially) /certificate /credits /units / exemptions to the applicant by the legitimate institution[24]. This may lead to individual learning paths as successful RPL applicants will only have to carry out the parts of the FCN qualification they did not acquire through prior learning.

The Personalization could include the following options in FCN training:

- taking elective or optional courses/ units/ modules aside the core, basic ones at the learner's own choice;
- varying the course order where possible;
- skipping courses ;
- choosing the area of the internship according to learner's personal interests and attitudes;
- choosing the area of the thesis project, according to learner's personal interests and attitudes;
- choosing part-time or full-time programmes or being allowed to extend the overall programme duration;
- being allowed to take online or blended courses /programmes.

Please keep in mind that these options for personalization can only be offered and implemented if there is a suitable system in place in your institution that allows for this kind of flexibility.

STAGE 3

The "*European guidelines for validating non-formal and informal learning*" (Cedefop (2015), 2nd edition) provide also very valuable input on this subject and should be considered for further reference.

According to the Cedefop guidelines, validation consists of four phases which include the same steps:

1. Identification
2. Documentation (STEP 3-4)
3. Assessment (STEP 5)
4. Certification (STEP 6)

The Cedefop guidelines support each of these phases with a number of Key Questions that can be used to carry out the necessary steps. The key questions are listed in the Annex 4.

Examples for such questions in the phase of implementation of validation are:

---

[24] Which institution is legitimized to certify prior learning depends on the legislation in your country. It might be your institution but could be also be professional bodies or chambers, etc.

- Has the purpose of the validation initiative been clarified? or: Which tools and instruments can be used (and combined) for identification, documentation and assessment of learning?

- An example for questions on assessment is: Are assessment tools adapted to the individual's needs and characteristics?

A draft of the RPL Process which could be implemented for the FCN ENhANCE Curriculum is outlined in Annex 5

Examples of RPL processes from different EU countries (ILPO55, 5ff.)

ROMANIA

Regulating authority: National Qualifications Authority (governmental body) http://www.anc.edu.ro/

Executing institutions: Centers for the Evaluation and Certification of Professional Competencies (must be authorized by an intermediate authority and listed in a National Register for the Centers http://www.anc.edu.ro/?page_id=1120)

Methodology based on the following principles:

- the principle of validation, which takes into consideration the evidences of competences based on the occupational standard;
- the principle of credibility that uses methods which conducts to the same results;
- the principle of impartiality that permits the participation of all interested individuals at the assessment process;
- the principle of equity facilitating the open access to the qualification programmes without any discrimination;
- the principle of quality of the training programmes related to the specific standards;
- the principle of relevance according to which education responds to the needs of the labour market;
- the principle of efficiency concerning the relation between high quality results obtained by using adequate spaces of learning;
- the principle of ensuring equal opportunities facilitates the participation of very individual that want to take part at the process of assessment and recognition of professional competences obtained in non-formal and informal contexts;
- the principle of flexibility means that the assessment is adapted to the needs of the candidates and the working place;
- the principle of confidentiality respecting the privacy of the candidate;
- the principle of simplicity

The Process of assessment is carried out by a minimum of two professional competence assessors and it is based on the competence units of the occupational standard for the particular vocational area. The professional competence assessor is a specialist with recent experience of work and / or coordination in the occupations / qualifications for which s/he is designated by the centre and is also certified by the National Qualifications Authority on the basis of the occupational standard "professional competence assessor".

The assessment and certifying process is based on the Guide of assessment (http://www.patrosec.ro/wp-content/uploads/2016/12/ghid-eval-cp.pdf), assessment instruments include:

- a written test;
- an oral test;
- a direct observation session – where the candidate's performance in real or simulated working conditions is observed and evaluated;
- a Project to be accomplished by the candidate;
- other activities which generate evidence prior to the assessment process such as: peer reports; portfolio of qualifications and/or records of work etc.

ITALY

Regulating authority (& Executing institutions): ISFOL/INAPP ((Institute for the professional development of workers, national research institute under the supervision of the Italian Ministry for Labour)

http://www.isfol.it/temi/Formazione_apprendimento/certificazione-delle-competenze/copy_of_validazione-e-certificazione-delle-competenze

http://www.inapp.org/it

Tool: *Libretto Formativo del Cittadino*: repository of the skills and competences obtained through formal, informal and non-formal ways

Name of Institution - Università Roma Tre

Region - Lazio

Description /Process – Roma Tre University is one of the earliest examples of RPL in Italy. "In the field of recognition of prior learning, *Roma Tre* University24 has done some research action, didactic, organizational and institutional activity. Some benchmarking analysis have been made, in particularly with the French *VAE* system and the British *APEL* model." This University is responsible for the development of a set of procedures which were tested in 2008-2010 with "145 adults attending a degree course in Education and Development of Human Resources."

Name of Institution - Università della Basilicata

Region - Basilicata

Process – Recognition of the achievements of learning outcomes acquired in non-formal and informal learning contexts through CFU credits as long as they satisfy the University's qualification requirements. The Course of study Committee can reduce the ordinary length of the study course depending on the number of recognized credits.

http://internazionale.unibas.it/site/home.html

SPAIN

Regulating authority: Instituto Nacional de Cualificaciones INCUAL

Executing institutions: Centers for the Evaluation and Certification of Professional Competencies (must be authorized by an intermediate authority and listed in a National Register for the Centers http://www.anc.edu.ro/?page_id=1120)

The Process for the Recognition of Prior Learning in Spain includes:

- a Counselling Session;
- an Assessment of the professional competences of the Individual, and;
- accreditation and recording of the professional competence.

Procedure (example for Catalonia)

1) Registration in the recognition service: done through the registration service through specific recognition templates either filled by the users and brought to school or completed with the help of advisors.

2) Filling of the on the recognition service - proof of credits or modules which want to be recognized by the Board Recognition.

3) Preparation of the assessment and recognition Dossier, following an official model.

4) Appointment of the Recognition Board: responsible for conducting the tests (resolution of cases, exams, interviews...) necessary for training evaluation. Recognition Board prepares a list of questions per module as a guideline for the interview.

5) The Board reviews the results in the assessment and recognition dossier, using the model 03 D. Once the assessment is finalised, it calculates the percentage of recognition of training units and/or modules.

6) The final results are transferred to the online management site of Ministry of Education and Vocational training. The system generates the document: Certification of overcoming training units achieved through the academic recognition of learning achieved by the work experience or social activities.

7) The certificate must be stamped and signed by the both secretary and director of the training centre. The training centre will make appropriate backups and save to the file of the student.

MALTA

Regulating authority: Ministry of Education, National Commission for Further and Higher Education

Executing institutions: Separate Sector Skills Units according to particular sectors. Each Sector Skills Unit consists of 7 members who monitor the National Occupational Standards with the aim of ensuring their consistency and relevance

The Process official process for Recognition of Prior learning offered at National level is still unavailable; a number of institutions are setting up their own departments and mechanisms for the provision of RPL services

Procedure (example for Tourism Studies) http://its.edu.mt/recognition-for-prior-learning-rpl.html

Evidence for the RPL process is to be presented in the form of a Portfolio. Any Formal Education Certificates are to be accredited by the recognised by the Malta Qualifications Recognition Information Centre (MQRIC)26

Institute for Tourism Studies

Two distinct phases:

Phase 1: Seeking guidance from ITS RPL expert; application; collection of evidence, and; sitting for an online self-assessment.

Phase 2: Following the outcome of the online-assessment the applicant may choose to process to the second phase in which s/he will be presented with the result of the assessment and related feedback. Candidates will be notified of any skills and/or competency gap and provided offered training accordingly. Administrative fees apply for the second phase of the process.

FINLAND[25]

General Situation: The Finnish VPL system is connected to the European level development of Higher Education (HE) as well as national higher educational regulations. In legislation related to education RPL is understood as a learner´s subjective right. These regulations take into account all students including diverse learners. Recommendations about implementation of RPL and efficient ways of recognizing prior learning when students move from further to higher education are in place. In addition, national and international good practices of VPL as well as recommendations for common principles are highlighted and disseminated.

Institutions: RPL practices exist within educational institutions i.e. schools, colleges and higher education institutions as a fixed part of educational system and curriculum. Each institution determines how RPL practices are implemented and who is responsible for them.

General information about VPL and curriculum are available on universities' web sites, and it is also provided by the Finnish Ministry of Education and Culture and the Finnish Board of Education.

Pedagogical management team of the university offers guidelines for RPL. Decisions relating to RPL are made by lecturers / tutors, in some universities also by student counsellors or head of pro-grammes. These procedures are indicated in the University's Degree Regulation, and are assessed by universities quality management systems and student feedback practices. Amongst the latest developments and initiatives concerning RPL in Finnish HE has been understanding work as an el-ement of the learning process.

Students have a possibility to discuss recognition of prior leaning with their tutors or student counsellors. Support is provided by lecturers/tutors and student counsellors at the educational institutions.

Amongst the latest developments and initiatives concerning RPL in Finnish HE, work experience has been acknowledged as a factor in the learning process. In addition, cooperation with educational and work organizations will be important in relation to RPL, especially when first of all skills and competences are highlighted and not the RPL process itself.

---

[25] from Duvekot/Halba 2014, 27f

The University of Eastern Finland (UEF) gives detailed information about the process on their website: https://kamu.uef.fi/en/student-book/recognition-of-prior-learning/

Additional examples are provided in Annex 6

10. Discussion

The results of T3.2 will play a fundamental role on the impact and the actual implementation of the EU FCN Curriculum. As a matter of fact, since it is supposed to play a reference role for any VET designer targeting FCN profile in any EU country, the EU Curriculum should be as much general as possible and "across-the-board"; in addition it should be modular and flexible, since it is supposed to be adaptable to different contexts and rules in the various EU countries. Being adaptable to different contexts requires to be "abstract" to some extent. The fundamental role played by T3.2 results is to provide concrete guides and tools supporting the actual implementation of the EU Curriculum accompanying the design of Localized Curricula. The modularity of the Curriculum, will be assured by the possibility of defining the number and the composition of the modules as well as by the selection of the suitable LOs, the learning strategies, the number of credits and the assessment tools.

So T3.2 results should be practical and concrete. In their first release (D3.2.1), they are supposed to be an input for pilot designers who will define their Localized Curricula in T3.3 (starting at the end of T3.2, in a "cascade process"). In such a way they could test these tools and guides, while designing their curricula. In their final release (D3.2.2) they are supposed to target any VET designer in FCN field and to provide an user-friendly and "across-the-board" support.

Based on these premises, one of the main challenges of T3.2 has been to make partners change their perspective of work, from an "academic research approach" to a very practical "tutorial" approach. All the surveys and analysis carried out within the Actions (performed both in T3.1 and T3.2) should have been translated in practical hint and recommendations for VET designers. To this end, the solution identified by the Task/WP coordinator was to involve them in a practical exercise aimed to identify hints for designers drawing inspiration from the Actions reports; this time, the hints should have been short, "taking directly to the designer" (in the "you" form) and possibly identifying steps of work. This activity has been not so easy for some partners, but the possibility of discussing about the results during a partner meeting (Athens – jan 2019) has been very useful to understand the value of the results and the possible future use of them.

In this document they have been formalized in terms of guides and MS Excel tools; these tools now can be easily edited and shared with pilot designers in a "Designer Toolkit". After the testing (T6.2) and the refinement (T3.2) carried out in the next months, the final results could be integrated in a user-friendly web-based interface able to provide an easy and interactive support to end users (VET designers) for the localization of the EU Curriculum, which will be the final release of T3.2 results.

11.   References

Abdel-Hameed AA, Al-Faris EA, Alorainy IA, Al-Rukban MO. (2005) The criteria and analysis of good multiple choice questions in a health professional setting. *Saudi Med Journal;* 26(10):1505-10.

Al-Rukban M. O. (2006). Guidelines for the construction of multiple choice questions tests. *Journal of family & community medicin*e, 13(3), 125-33.

Alvino, S., Mazzarino, B., … Asensio-Pérez J.I. (2018). *D3.2.2 Guidelines supporting the use of the EU framework for VET in the field of homecare - final version.* CARESS Project Deliverable. Available at http://www.project-caress.eu/home/results/results.html

Alvino, S. Dagnino F., Mazzarino, B., Sistini, C; Eftychia, S. …Papagiannis, D. (2019). *D3.1.1 FCN Curriculum – First release*. Enhance Project Deliverable.

Anastasi, A., & Foley, J. P., Jr. (1949). *Differential psychology; individual and group differences in behavior* (2nd ed.). Oxford, England: Macmillan.

Banks, S. R. (2005). *Classroom assessment-issues and practices*, Boston: Pearson Education Inc.

Baraz, S., Memarian, R., & Vanaki, Z. (2015). Learning challenges of nursing students in clinical environments: A qualitative study in iran. *Journal of Education and Health Promotion*, 4, 52-9531.162345. eCollection 2015. doi:10.4103/2277-9531.162345 [doi]

Bentley, T. & Miller R. (2004). Personalisation; Creating the Ingredients for Systematic and Society-wide Change. Paper presented in Personalised Learning Conference, London, 17-18 May.

Boud, D. (2001). Using journal writing to enhance reflective practice. *New Directions for Adult and Continuing Education*, 2001, 9–18. doi:10.1002/ace.16

Brennan, M. J. (1995). Essay writing in nursing: alerting students and teachers to the educational benefits, Nursing Education Today, 1:351–356.

Brusilovsky, P., & Peylo, C. (2003). Adaptive and Intelligent Web-based Educational Systems. *International Journal of Artificial Intelligence in Education,* 13(2-4), 156-169.

Burton, A. J. (2000). Reflection: Nursing's practice and education panacea? *Journal of Advanced Nursing*, 31, 1009–1017.10.1046/j.1365-2648.2000.01395.

Case, Susan M., & Swanson, D. (2002). Constructing Written Test Questions For the Basic and Clinical Sciences. National Board of Examiners.

Cedefop (2015). European guidelines for validating non-formal and informal learning. Luxembourg: Publications Office. Cedefop reference series; No 104. doi: 10.2801/008370

Cherry, B. & Jacob, S. R.   (2002). *Contemporary Nursing-issues, trends and management*, 2nd Edition, St.Louis: Mosby.

Clarke, D. N. J. & Lisa R Copeland (2003). Developing nursing practice through work-based learning. *Nurse education in practice,* 3(4), 236-44 . doi:10.1016/S1471-5953(03)00004-0

De Bra, P., Kay, J. & Weibelzahl, S. (2009). Introduction to the Special Issue on Personalization. *IEEE Transactions on Learning Technologies*, 2(1), 1-2 doi: 10.1109/TLT.2009.15

Dewey, J. (1993). *How we think: A reflective thinking to the educative process*. Chicago, IL: Henry Regnery.

Duvekot, R. and Halba, B. (2014): Validation of Prior learning (VPL) in Europe's higher education. A focus on personalizing the VPL-model. Erasmus project ALLinHE (2011-2014)

EdCan (2009) Assessment Fact Sheet: Constructed Response Assessments (Essays). In "A National Professional Development Framework for Cancer Nursing" Retrieved from http://edcan.org.au/professional-development/edcan-framework

ENhANCE Learning Outcomes Merge Report. 2018. Accessed on Dec 2018 https://drive.google.com/drive/folders/1hgbn0YVzEeobW3Fs17REq9Rms3arRkRq

EMEU (2016). ECVET Manual for EMEU - Transfer, recognition and accumulation of learning outcomes. Available at: https://em-eu.eu/media/1343/ecvet-manual-for-emeu-final.pdf

EU (2015). ECTS Users' Guide. Available at https://europass.cedefop.europa.eu/sites/default/files/ects-users-guide_en.pdf

EU (n.a.),Workbased learning Toolkit. Accessed on Nov 2018, https://www.wbltoolkit.eu/site/introduction/whatiswbl.

EU (2018). Council Recommendation of 15 March 2018 on a European Framework for Quality and Effective Apprenticeships, OJ C 153, 2.5.1–6. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:C:2018:153:TOC

Eysenck, H. J. & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach*. New York: Plenum.

Griffin, P. (1996). Assessment methods. Melbourne: The University of Melbourne

Henze, N., Dolog, P., & Nejdl, W. (2004). Reasoning and Ontologies for Personalized E-Learning in the Semantic Web. *Educational Technology & Society*, 7 (4), 82-97.

Hawley, J., Souto Otero, M. and Duchemin, C. (Eds) (2010). Update of the European Inventory on Validation of Non-formal and Informal Learning. CEDEFOP.

International Labour Office (2018). Recognition of Prior Learning (RPL): Learning Package; International Labour Office, Skills and Employability Branch / Employment Policy Department. Available at https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_626246.pdf

ILPO55 - Erasmus+ project "Intergenerational Learning Partnership Over 55", 2017. Guideline "EMPLOYABILITY_PORTFOLIO_TOOL_6 - RPL- RATIONALE AND GUIDELINES". Available at https://www.ilpo55.eu/it/ilpo55_activities06.aspx

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

Jonassen, D. H. & Grabowski, B. L. (1993). *Handbook of Individual Difference, Learning, and Instruction*. Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.

Lee, Y. (2004). How To Consider Individual Differences In Online Learning Environments. In C. Crawford et al. (Eds.), *Proceedings of Society for Information Technology and Teacher Education International Conference 2004*, 545-550, Chesapeake, VA: AACE.

McFetridge, B. & Deeny, P. (2004). The sue of case studies as a learning method during pre- registration critical care placement, *Nurse Education in Practice*, 4, 208–215

Mctiernan, K., Smith, M. & Walsh, I. (2007). The 'triple jump' assessment in problem based learning: An evaluative method used in the appraisal of both knowledge acquisition and problem solving skill. In O'Neill, G., Huntley-Moore, S. and Race, P. (Editors), *Case Studies of Good Practices in Assessment of Student Learning in Higher Education,* Dublin: AISHE, 2007. Released under Creative Commons licence: Attribution-NonCommercial-ShareAlike 3.0. Some rights reserved. Retrieved from http://www.aishe.org/readings/2007-1/

Merrill, M. D. (2002). Instructional Goals and Learning Styles: Which takes Precedence? In Reiser, R. & Dempsey, J. (Eds.) Trends and Issues in Instructional Technology, Prentice Hall.

O'Connor, T. (1997). Using learning styles to adapt technology for higher education. *Retrieved April*, *17*, 2006.

Pozzi, F. (2010). Supporting Group and Individual Processes in Web-Based Collaborative Learning Environments. In Web-Based Education: Concepts, Methodologies, Tools and Applications (pp. 345-363). IGI Global

Rees, C. E., Crampton, P., Kent, F., Brown, T., Hood, K., Leech, M., . . . Williams, B. (2018). Understanding students' and clinicians' experiences of informal interprofessional workplace learning: An australian qualitative study. *BMJ Open, 8(4)*, e021238-2017-021238. doi:10.1136/bmjopen-2017-021238

Schuwirth, L. W. T., & van der Vleuten, C. P. M (2003). ABC of learning and teaching in medicine- Written assessment, *BMJ*, 326: 643–645. doi: 10.1136/bmj.326.7390. 643

Smith, R. (1993). The triple-jump examination as an assessment tool in the problem-based medical curriculum at the University of Hawaii. *Academic medicine : journal of the Association of American Medical Colleges*. 68. 366-72.

Strandell-Laine, C., Stolt, M., eino-Kilpi, E., Saarikoski, M., Use of mobile devices in nursing student–nurse teacher cooperation during the clinical practicum: An integrative review, *Nurse Education Today*, 35(3), 2015, 493-499, doi:10.1016/j.nedt.2014.10.007.

Swindell, M. L., & Watson, J. (2006). Teaching ethics through self-reflective practice. *Journal of Social Work Values and Ethics*, 3(2), 1–20

Tarrant M, Ware J. A framework for improving the quality of multiple-choice assessments. (2012) Nurse Education, 37(3):98-104. doi:10.1097/NNE.0b013e31825041d0

Williams, C. (2010). Understanding the essential elements of work-based learning and its relevance to everyday clinical practice. *Journal of Nursing Management, 18(6)*, 624-632. doi:10.1111/j.1365-2834.2010.01141.

12.   Annex 1:Tips and Recommendations Form

Recommendations and practical tips for the instantiation of the EU Curriculum

On the basis of the knowledge gained through the work done in WP3, especially (but not exclusively) concerning Action 2 (Compliance with the call and the proposal), Action 3 (Work based learning), Action 4 (How to integrate practice sharing in the curriculum), Flexibility and Assessment Tables, each partner involved in T3.1/T3.2 is invited to identify possible suggestions for curriculum instantiation/implementation in the National contexts.

Contributions can range from theoretical recommendations (general of specific) for curriculum adaptations according to specific needs or regulations or its implementation, to practical tips (e.g. administrative, logistics, practical didactics issues).

Please select among the following areas, the one/s to which the TIP or RECCOMENDATION is related and describe it in the text-box below

AUTHOR NAME:_____

PARTNER NAME:_____

Area *(you can choose more than one)*

- ☐ Assessment (criteria, tools, etc.)
- ☐ Work based learning (apprenticeship, traineeship, etc.)
- ☐ Compliance with National Curricula and National Regulations
- ☐ Definition of modules
- ☐ Level of study and compulsoriness/optionality of Learning Outcomes
- ☐ Educational strategies
- ☐ Practice sharing
- ☐ Compliance with EC standard tools and classifications (ECVET, ESCO, EQF)
- ☐ Credits (ECTS)
- ☐ Other
  (specify)_____
- ☐

☐ **TIP** or ☐ **RECOMMENDATION**

TITLE:

DESCRIPTION:

13.   Annex 2: Recommendations and practical tips for the instantiation of the EU Curriculum

This Annex lists all the Tips and Recommendations provided by Partners contributing to T3.2, classified into the following 5 "main topics":

1. How to define Modules

2. How to use the Flexibility Table

3. How to design effective WBL

4. How to design effective practice sharing

5. How to design an effective assessment

An additional category "other issues" is included, collecting all the Tips and Recommendations which don't fit with the above listed "main topics"

13.1   How to define Modules

AREA: Definition of modules
TITLE: Forming Modules from Units of Learning Outcomes
DESCRIPTION: To form Modules, there are two possibilities:
  1. The Modules can be the same as the proposed 7 Units of Learning Outcomes:
  (1) NEEDS ASSESSMENT
  (2) DECISION MAKING PROCESS
  (3) HEALTH PROMOTION AND EDUCATION
  (4) COMMUNICATION
  (5) NAVIGATION AS CARE COORDINATOR AND PATIENT ADVOCATE
  (6) EVIDENCE BASED APPROACH
  (7) ENHANCE AND PROMOTE INDIVIDUAL AND FAMILY HEALTH INCLUDING E-HEALTH TO SUPPORT THE QUALITY OF NURSING CARE

Being an integral part of ECVET and therefore born in the context of transnational mobility, the main aim of Unit of Learning outcomes is to provide an as cohesive and structured learning process as possible so that individual units can be completed abroad.

  2. The Modules can be organized in a different way compared to the Groups of Core Competences/Key Activities/Units of Learning Outcomes, for example:
  (1) HEALTH PROMOTION AND EDUCATION
  (2) EVIDENCE BASED PRACTICES
  (3) COMMUNICATION
  (4) NAVIGATION AS CARE COORDINATOR AND PATIENT ADVOCATE
  (5) ENHANCE AND PROMOTE INDIVIDUAL AND FAMILY HEALTH INCLUDING E-HEALTH TO SUPPORT THE QUALITY OF NURSING CARE.

The names of the modules (so far) are suggestions and can be changed.

Transparency and comparability of qualifications as well as the recognition of learning outcomes are closely connected to the modularization of studies. Therefore, it is important that the modules created on the basis of the Units of Learning

Outcomes fulfill the general requirements of module design (EU and national regulations) as well as serve the requirements for curriculum design (e.g. organizational requirements) and do justice to the content /learning outcomes (e.g. meaningful, coherent structure).

AREA: Definition of modules
TITLE: Forming Modules from Units of Learning Outcomes
DESCRIPTION: To form Modules, there are two possibilities:
  3. The Modules can be the same as the proposed 7 Units of Learning Outcomes:
  (1) NEEDS ASSESSMENT
  (2) DECISION MAKING PROCESS
   (3) HEALTH PROMOTION AND EDUCATION
  (4) COMMUNICATION
  (5) NAVIGATION AS CARE COORDINATOR AND PATIENT ADVOCATE
  (6) EVIDENCE BASED APPROACH
  (7) ENHANCE AND PROMOTE INDIVIDUAL AND FAMILY HEALTH INCLUDING E-HEALTH TO SUPPORT THE QUALITY OF NURSING CARE

Being an integral part of ECVET and therefore born in the context of transnational mobility, the main aim of Unit of Learning outcomes is to provide an as cohesive and structured learning process as possible so that individual units can be completed abroad.
  4. The Modules can be organized in a different way compared to the Groups of Core Competences/Key Activities/Units of Learning Outcomes, for example:
  (1) HEALTH PROMOTION AND EDUCATION
  (2) EVIDENCE BASED PRACTICES
  (3) COMMUNICATION
  (4) NAVIGATION AS CARE COORDINATOR AND PATIENT ADVOCATE
  (5) ENHANCE AND PROMOTE INDIVIDUAL AND FAMILY HEALTH INCLUDING E-HEALTH TO SUPPORT THE QUALITY OF NURSING CARE.

The names of the modules (so far) are suggestions and can be changed.

Transparency and comparability of qualifications as well as the recognition of learning outcomes are closely connected to the modularization of studies. Therefore, it is important that the modules created on the basis of the Units of Learning Outcomes fulfill the general requirements of module design (EU and national regulations) as well as serve the requirements for curriculum design (e.g. organizational requirements) and do justice to the content /learning outcomes (e.g. meaningful, coherent structure).

13.2 How to use the Flexibility Table

AREA: Credits (ECTS)
TITLE: The European credit transfer and accumulation system
DESCRIPTION: To make learning more student-centered we recommend developing the pilot according to the European credit transfer and accumulation

---

system (ECTS) the master pilot course should have 60 credits according to the European regulation.

AREA: Educational strategies
TITLE: Doing more with less - blended
DESCRIPTION: Digital learning is expected to offer multiple advantages, namely in terms of broadened access for all to education. The potential benefits include diverse knowledge sources often provided for free, no geographical limits, flexible timetables and methods that can be easily personalised and the possibility for teachers to share and create content with colleagues and learners from different countries.
Blended educational model combines traditional (class-room) training with digital on-line content. With blended learning, students are not limited by their individual teachers' specific expertise or teaching methods. Professionals claim that in blended models teachers can spend less time assessing students and more time teaching and creating learning paths or 'playlists' to match individual students' needs. A meta-analysis (Means et al., 2013) comparing the effectiveness of online and face-to-face instruction concluded that blended learning had a larger advantage relative to purely face-to-face or purely online instruction. Analysis shows that blended learning environments are still students' preferred option.
Means, B., Toyama, Y., Murphy, R., & Bakia, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. Teachers College Record, 115(3), 1-47.

AREA: Credits (ECTS)
TITLE: ECTS
DESCRIPTION: Create a credit flexible curriculum but you should take under consideration these two main issues:
-   If the curriculum will lead to an FCN Master's Degree, credits (ECTS) should be 60-120 (1 to 2 years).
-   If the curriculum will be a master course that gives an FCN Specialization, credits (ECTS) should be 30-50.

AREA: Other (specify): Adult Education
TITLE: Adult Education
DESCRIPTION: One thing that should be taken under consideration when preparing a lesson is the age of the participants. Individuals that are usually participating in VET programs are adults.
Adult learners are primarily in charge of their own learning and they need to know why they are learning something, they learn through doing, they learn best when the subject is of immediate use, they prefer social interaction, they tend to use their life experiences in the classroom and they want to integrate new ideas with existing knowledge.
In adult training the integration of active learning strategies is vital, so strategies and methods such as problem based learning, argumentation, think – pair- share can be motivating for adult learners. In addition, the integration of new technologies and interactive applications should be also under consideration. Finally, the use of short films during the class have be proven to be an effective strategy also.

AREA: Educational strategies
TITLE: Educational strategies
DESCRIPTION: Nurse educators should ensure that learners are processing the new knowledge delivered to them through the educational programs. Educational

sessions should be designed taking into account that this is the main fundamental component of how the educational process should be planned and facilitated.

It is of great importance to select appropriate teaching strategies in nurse education to make the training more appealing and more effective.

Xu (2016) (https://doi.org/10.1016/j.cnre.2016.06.002) suggests ten strategies that improve nurses' learning:

Strategy one: lecture

Although the lecture seems to be a somewhat boring teaching method, it is still the most basic teaching strategy for instructors. With the development of technology, the lecture can be combined with a variety of other techniques, for example, Prezi presentation software, videos, and the Poll Everywhere application. Not only can this kind of combination attract students' attention, but it can also make the lecture a lot of fun.

Strategy two: high-fidelity simulation

Simulation provides innovative educational experiences that help nurses assess and develop clinical competency, promote teamwork, and improve care processes in a realistic and relatively safe environment without the potential of harm to patients. Simulation often emphasizes the application and integration of knowledge, skills, and critical thinking.

Strategy three: concept mapping

Concept mapping is a technique that allows students to understand the relationships between ideas by creating a visual map of the connections. Concept maps allows the student to see the connections between ideas that they already have; connect new ideas to their existing knowledge; and organize ideas in a logical, but not rigid, structure that allows new information or viewpoints to be included in the future.

Strategy four: online courses

Online courses are an effective strategy for continuing education for nurses in clinical settings. The instructor should prepare diverse learning materials, such as literature, videos, websites, and discussion forums. Upon completion, an online test is required to evaluate comprehension. In this case, nurses are able to control their study time, and they also have time to absorb the materials.

Strategy five: games

Games are not only fun, but also an effective teaching strategy. The use of games as a teaching strategy encourages involvement and increases both the motivation and the interest of the student. Games can make learning more enjoyable.

Strategy six: role playing

Role playing is a particularly useful strategy for practicing clinical communication skills and dealing with conflict. Role playing can also be very effective for experiencing cultural principles and awareness because it allows students to become emotionally involved in cross-cultural learning and reflect upon cultural differences.

Strategy seven: jigsaw classroom

The Jigsaw Classroom is a wonderful teaching strategy for cooperative learning. This strategy, developed by Elliot Aronson, involves the formation of Home Groups to resolve a task. The Home Groups allocate one member to each Expert or Research Group, who gather data to bring back to the Home Group. The jigsaw process encourages listening, engagement, and empathy by giving each member of the group an essential part to play in the academic activity.

Strategy eight: case study

Case studies bridge the gap between theory and practice, and between the classroom and the workplace. They also give students practice identifying the parameters of a problem, recognizing and articulating positions, evaluating courses of action, and arguing different points of view.

Strategy nine: debating

Debating is presenting the "pro" and "con" arguments of a specific assertion, proposition, or solution to a problem. This teaching/learning strategy offers students an opportunity to learn new content in an exciting way.

Strategy ten: problem-based learning

The teaching method that uses patient situations or scenarios to stimulate students to acquire and apply information to solve problems is known as problem-based learning (PBL). Educators present realistic patient scenarios, ask questions, and require students to search for holistic answers.

AREA: Educational strategies

TITLE: Teaching philosophy

DESCRIPTION: Becoming an effective nursing educator, you should reflect on your **teaching philosophy**, preconceived ideas, and preferences that may influence your teaching skills and students' abilities to learn.

For example, if you agree with the statement made by Albert Einstein: *"Education isn't the learning of facts, but the training of the mind to think"* … then as an educator, firstly, you should create an effective – educational environment by:

- developing a trusting and friendly relationship with students, facilitate their learning, and give them opportunities to expand their thinking and improve their nursing skills.
- Give timely feedback to students and allow them to constructively criticize your teaching approaches and abilities. With this philosophy, you can teach students to think critically and apply their knowledge to real-life nursing practice.

AREA: Educational strategies

TITLE: Principles for effective teaching online

DESCRIPTION: Teaching in an online environment can be quite different than teaching in a classroom. Teaching online requires specific competencies and skills associated with effective online course teaching and facilitation.

Online courses have little or no face-to-face component; therefore, credit hours are not determined by the amount of time students spend in the Learning Management System (LMS), but rather by the amount of time students are engaged in course work such as discussion boards, assignments, readings, synchronous and asynchronous discussions, and other activities.

Therefore, to be an effective online educator, there are some simple, but effective practices you can follow.

Before the Course Begins

Before your online course begins, it is important that you feel confident using the tools in the online learning environment and that you become familiar with how the course is set up. The following are some of the key activities to consider:

- Create an effective course outline that communicates course expectations, guidelines of online behavior, and course organization
- Effectively use the learning management system (LMS) and other technologies selected to support the course, including Microsoft Office and Adobe Acrobat
- Possess an understanding of copyright and intellectual property issues in using content in an online course

During the Course

If you are new to teaching online, fostering an engaging and interactive online learning environment for your students may seem challenging. The following are a number of strategies and considerations to keep in mind during the course:

- Teach students about online learning and help them to connect materials

> with their own personal learning styles
> - Promote active learning techniques and relate the subject matter to students' interests and experiences
> - Develop relationships with students and encourage social interaction between students
> - Encourage the exchange of ideas, arguments and perspectives among students to facilitate the development of a community of learners
> - Promote collaborative learning and model good participation; if needed, redirect the discussion, if headed in the wrong direction
> - Create ongoing opportunities for reflection, critical analysis, and self-exploration
> - Encourage students to respect the course schedule and assignment submission due dates
> - Provide students with meaningful feedback on their assignments and participation in a timely fashion
> - Maintain frequent contact with students
> - Effectively and efficiently manage and administer the course
> - Be sensitive to disabilities and diversities, and respect various ways of learning
> - Monitor student compliance to the University's academic integrity polices
> - Effectively navigate the course website and use the tools of the course LMS
>
> **After the Course Ends**
> The end of a course can be busy but it is important to continue to engage with students, take care of administrative tasks and take time to reflect on your practice. Consider following these steps as the course comes to a close:
> - Provide students with assignment grades and submit final grades to your academic department
> - Give prompt feedback to students on final papers and tests
>
> Evaluate your own teachings

AREA: Educational strategies
TITLE: Learners' motivation and engagement
DESCRIPTION:
Use of gamification strategies to support learners' motivation and engagement in the learning process.

AREA: Compliance with National Curricula and National Regulations
TITLE: Duration of the traineeship
DESCRIPTION: The duration of the traineeship depends on the type of nursing degree, as there are 2 types of degrees: university-based degree studies and Technological Educational Institutes (TEI) studies. The duration of traineeship in university-based bachelor studies is optional, should last at least 2 months and take place in the last semesters. TEI studies include 6 months/ 1 semester of supervised practice after the 7th semester.

AREA: Compliance with EC standard tools and classifications (ECVET, ESCO, EQF)
TITLE: Adaption to EQF6
DESCRIPTION: For the local contexts that will design and offer the FCN qualification on EQF6 (as an additional diploma for graduated nurses) it is necessary to address all relevant professional competences ($\rightarrow$ 28 Core Competences) but to reduce their complexity and the related Learning Outcomes taking the following steps:

- Check all Learning Outcomes and identify the LO that are clearly on EQF7 using the level descriptors[26]. These are Learning Outcomes that require:
  - highly specialised knowledge […] as the basis for original thinking and/or research and critical awareness of knowledge issues in a field and at the interface between different fields
  - specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures.
  - management and transformation of work or study contexts, that are complex unpredictable and require new strategic approaches; taking responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams.
- Adjust knowledge, skills, personal and transversal competences to make it suitable for EQF6, for example by reducing one or all of the following:
  a. knowledge (concepts, procedures, etc.)
  b. skills (e.g. with regards to role model/leader/mentoring and tutoring activities)
  c. complexity of situations (e.g. with regards to networks and contexts to act in)
  d. responsibility and autonomy (affecting mainly leadership, mentoring and management tasks).
- Adjust the curriculum (teaching methods, assessment tools, etc.) accordingly.

If applicable

1. Rephrase the Learning Outcomes to match the content if applicable.

Rephrase the professional/Core Competence if it is to be communicated (e.g. in the diploma) with the aim to create transparency and comparability among FCNs and their qualifications.

AREA: Educational strategies
TITLE: E-learning and/or blended learning to support personalization
DESCRIPTION: Take advantage of e-learning and/or blended learning to guarantee flexibility to learners that could define their own learning objectives and access materials and courses at their own pace and availability.

13.3 How to design effective WBL

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: Clinical practica for learning and for role taking
DESCRIPTION:
- Defining criteria to identify learning setting
- Defining criteria to appoint a dedicated tutor.
- Defining tools to assess learning settings (e.g. CLES-T)

Clinical practica for learning: students are brought into contact with patients in order to achieve specific learning outcomes and will not be individually assigned to patient

---

[26] see https://ec.europa.eu/ploteus/en/content/descriptors-page

care.

Clinical practica for role taking: students are placed in a clinical setting to learn an authentic nursing role as part of a nursing and/or multi-professional team and this always includes responsibility for patient care.

Practica appropriately linked in time with the theory (e.g. not theory before practice). When planning and monitoring clinical learning periods, role functions and competencies should be the focus instead of minimum clinical hours and procedures.

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: Work based learning 1
DESCRIPTION: Through our assessment process of the current curricula of the targeted countries, it seemed that generally, most of the focus was on other means of learning rather than work-based learning. We have identified some competences that are best suited to be achieved by the work-based learning. Here is our suggested list.

They include the following competences:
Commitment, Holistical Conception, Management of care and services at the household and community level, Communication skills, Addressing the role of partnerships and leadership, Independently advising and teaching, Working independently, Collaboration, Skills in negotiating, coaching, Teaching, Assessing and managing unpredictable situations, Ongoing management of people with multiple pathology and long term conditions, Integration of knowledge in nursing and community health, Management function and skills, Immediately implement life-saving measures, contact learning, Work practice, Self-directed learning skills, Decide independently, Customer-centered nursing, Apply and develop evidence-based activities, Leadership skills, Professional relationships with patients and their families.

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: Work based learning 2
DESCRIPTION: Nursing is an applied human-centered science with multidimensional methodology that requires both theoretical training and work based learning experience gained through practice in health care services and settings.
During an FCN curriculum nursing students must practice in Public and Private Community Health Centers and Primary Health Organizations in order to:
- Apply the theoretical knowledge acquired during their basic education in order to provide comprehensive and personalized health care and implement nursing interventions for the healthy and sick individuals, families and communities to meet all needs in physical, mental and social level.
- Be familiar with the use of new technologies, medical instruments, equipment, devices, and therapeutic pharmaceutical schemes.
- Develop communicational and interpersonal skills that are very essential for the effective and qualitative nursing practice.
- Acquire real-time competencies about administration, organization and operation of a nursing unit in a Primary Health Care Organization.
- Get adnanced knowledge about modern methods of productive procedures.

For the Work Based Learning – Placement there should be:
- Work contracts between students and the employment agencies (health centers – primary health settings) that should describe working conditions, rights and obligations.

> - Outlines of practice placement describing the student's subjects and skills.
> - Codes and guidelines describing how work based learning is organised and specific issues about best practices.

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: Employers consent that WBL takes place at site of employment
DESCRIPTION: In the case of currently employed graduate nurses, most likely they will need to obtain consent from their employer that part of the work-based learning components of the FCN programme takes place at the employer's site.

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: WBL percentage in a FCN program degree
DESCRIPTION: In the case that the FCN specialization is being offered in the form of a part- or full-time Master's degree (60, 90 or 120 ECTS), WBL should consist of at least 50% of the course.

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: Procedures in place for graduate nurses to obtain agreement from employer
DESCRIPTION: In the case the target audience of graduate nurses are professionally active and underlined employed, adopt the necessary procedures for them to be able to obtain agreement from their employer to participate in the theory-based learning courses.

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: Traineeship booklet
DESCRIPTION: During the traineeship, students shall use a traineeship booklet, which is in the form of a calendar. Each week of the traineeship the student shall mark the wards visited and skills acquired, as well as provide a brief description of duties in the workplace. The training supervisor shall review and sign the booklet. (This is a good practice used by Alexander Technological Educational Institute of Thessaloniki.)

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: work based learning 3
DESCRIPTION: FCN in our country is not very well known and its activity is not widespread. It is therefore difficult to identify contexts in which students can observe and participate in the family nurse's own activities. ALISA recommend that, for the Italian Pilot, the students should perform at least a part of the internship in the Internal Areas where the experimentation of the family nurse is active. Part of the training could be carried out at the home care services, with specific objectives and guidelines. If possible, it would be appropriated to provide the internship in other regions (e.g. the Piedmont where the figure of FCN has been tested).

AREA: Work based learning (apprenticeship, traineeship, etc.)
TITLE: Check to what extent WBL is mandatory component if FCN specialization is in the form of a short course (e.g. stand-alone module, CPD)
DESCRIPTION: Depending on the type of FCN specialization being offered, check whether it is required to include WBL as a mandatory component. It may not be necessary in the case of a shorter type of FCN specialization which targets professionally active nurses who already have accumulated a number of years of prior work experience.
Shorter type of FCN specializations in the form of a 'professional certificate' or stand-alone modules are offered in some countries. These courses can be offered

by universities or professional nursing societies, and they often apply blended learning methods. In these cases, the courses mostly do <u>not</u> include <u>any</u> work-based learning at all other than what is stipulated by the course entry requirements, which however may require a number of years of work experience.

AREA: Other (specify): Insurance coverage or social security entitlements
TITLE: Ensure course participants are appropriately insured and have necessary social security coverage
DESCRIPTION: When setting up the course, check that appropriate arrangements have been made to cover course participants in terms of their potential relevant social security entitlements or other insurance issues (covering occupational accidents, accidents and damages caused to third parties, occupational diseases and health insurance) that may concern them in particular in the context of their work-based learning placements. The requirements may also differ depending on the graduate nurses' current occupational status e.g. student, independent/self-employed, employed, unoccupied (on leave, unemployed etc).

AREA: Other (specify): Privacy, ethics and confidentiality
TITLE: Privacy, confidentiality issues and compliance with relevant EU regulations and national rules
DESCRIPTION: Ensure procedures are in place to ensure adherence to relevant EU or national regulations concerning the protection of personal data.
In addition, the graduate nurses enrolled in the course may need to comply with the applicable rules to respect patient privacy (while delivering community-based care) and other confidentiality issues that may emerge during their course participation and in particular during their work-based learning.
More generally, aspects dealing with legal, ethical and confidentiality issues linked to the provision of community or home care, might therefore need to be adequately addressed and integrated as learning modules in the theoretical-based part of the course.

13.4 How to design effective practice sharing

AREA: Practice sharing
TITLE: Practice sharing 1
DESCRIPTION: Practice sharing should enhance learning through interactions between students and teachers in the class.
Practice sharing can be succeed with in different methods such as role playing, case studies, assignments, simulation situations, video watching, discussion sessions.
Practice sharing should happen in a way that will create a learning environment that will enhance and develop the ability of complex problem solving and critical thinking skills and disposition of FCN students.
World Economic Forum reports that complex problem solving and critical thinking are the two top skills that are most needed for success in 2020.

AREA: Practice sharing
TITLE: Practice sharing 2
DESCRIPTION: The training of Italian nurses is still to date "hospital centered" (acute care) and often the teachers do not have adequate knowledge and experience on primary care. The role of the family nurse is little known, and its activities are present in a spotlight of leopard and in non-uniform ways in the healthcare services.
It would be very useful if Italian pilot students could use practice sharing with students of other pilots in order to broaden the vision and knowledge of family

---

nursing in terms of primary care, proactivity of interventions, management of chronic disease and prevention of fragility.

AREA: Practice sharing
TITLE: Practice sharing 3
DESCRIPTION: The training of Italian nurses is still to date "hospital centered" (acute care) and often the teachers do not have adequate knowledge and experience on primary care. The role of the family nurse is little known, and its activities are present in a spotlight of leopard and in non-uniform ways in the healthcare services.
 It would be very useful if Italian pilot students could use practice sharing with students of other pilots in order to broaden the vision and knowledge of family nursing in terms of primary care, proactivity of interventions, management of chronic disease and prevention of fragility.

AREA: Practice sharing
TITLE: Teacher training about collaborative learning activities and learning design
DESCRIPTION:
In order to support practice sharing during the course and allow teachers to propose meaningful collaborative learning activities, any VET provider should check and guarantee perspective teachers are adequately trained on the following aspects:
  • What competencies / learning outcomes can meaningfully be addressed by collaborative learning approaches?
  • What collaborative learning techniques /methods exist and better apply to the competencies /learning outcomes to be addressed?
  • How to effectively design a collaborative learning activity? How component should be considered (task, time, team, technology)
  • How to effectively support students during the activity and how to orchestrate the learning environment?
  • How to monitor and evaluate the learning process and how to assess students at the end of a collaborative learning activity?

AREA: Practice sharing
TITLE: Collaborative learning approaches to promote practice sharing and co-construction of knowledge
DESCRIPTION:
Propose collaborative learning activities able to valorize the single learner's experience through practice sharing and peer discussion, so to support the co-construction of new knowledge (Jarvela, 2006). Strategies, such as peer review, case studies, discussion should be used to promote practice sharing and the development of the community dimension.

13.5 How to design an effective assessment

AREA: Assessment (criteria, tools, etc.)
TITLE: The objective structured clinical examination (OSCE)
DESCRIPTION: Master's candidates are required to act out scenarios that nurses are likely to encounter when assessing, planning, delivering and evaluating care

---

AREA: Assessment (criteria, tools, etc.)
TITLE: Assessment Criteria
DESCRIPTION:

- Evaluation should be a continuous process, the results of which will be used as feedback for the improvement of education.
- The evaluation should cover all aspects regarding education (teachers, students, courses, procedures, infrastructures).
- The evaluation should be based on specific and measurable indicators, which will be recorded in databases in order to monitor their evolution over time.
- Student's assessment may include written examination, written work, essay presentation, demonstration of skills and techniques, etc.
- The assessment of student performance should be based on objective and reliable criteria.
- The performance of students should be monitored and intervened if necessary.

AREA: Assessment (criteria, tools, etc.)
TITLE: Monitoring and evaluation of learning process
DESCRIPTION:
- Use a suggested - appropriate methods of assessment and evaluation of learning that are linked to learning outcomes, including:
  - ☐ Single/multiple choice examination
  - ☐ Essay writing
  - ☐ Seminar presentation
  - ☐ Case study
  - ☐ Projects
  - ☐ Objective structured clinical exams (OSCEs)
  - ☐ Objective structured behavioural exams (OSBEs).
- Construct assessment tools including examination blueprints, examination item writing, item validity, and reliability.
- Participate in setting pass or fail standards and assessment criteria.
- Provide learners with timely, constructive feedback.
- Use assessment and evaluation data to enhance the teaching/learning process.
- Maintain accurate records of student progress and achievement for continuous quality improvement (CQI) and external validation.
- Make objective judgements about the competence/ proficiency of students.

AREA: Assessment (criteria, tools, etc.)
TITLE: Assessment – Transcript of Records
DESCRIPTION: An assessment process results in a statement on whether the envisaged learning outcomes have been achieved and whether the learning process has been completed successfully. This is to be certified by written documents.
If an integrated assessment for obtaining a complete qualification has been passed, the competent institution is to issue a certificate on this degree. It is recommended to supplement this certificate by a personal transcript of records (including the description of the achieved learning outcomes).
This personal transcript should – similar to the europass mobility – contain the following information:
- Details about the learner
- Details about the issuing institution including contact person and contact data
- Training history
- Description of Skills and competences acquired

- Activities or tasks performed, if applicable
- Professional competences, skills and knowledge acquired
- Language skills and competences acquired
- ICT skills acquired
- Other skills (social, organisational, etc.) acquired

For the obtainment of partial qualifications, for example during international mobility projects, the institutions competent to issue certificates will do this according to their standard procedures. If practical training (internship) has been completed abroad, the internship company is to issue a certificate. Both document types should be supplemented by the "Europass mobility" and / or adding to the personal transcript.

AREA: Assessment (criteria, tools, etc.)
TITLE: Assessment
DESCRIPTION: Although each educational program comes with a set of defined objectives and learning outcomes, it is crucial that the difference between the intended learning outcomes and achieved learning outcomes is established (European Centre for the Development of Vocational Training, 2017), whereby the relationship between the two creates a loop of interaction resulting in a continuous improvement process (Figure 1; European Centre for the Development of Vocational Training, 2017).

Figure 1. Relationship between intended and achieved learning outcomes
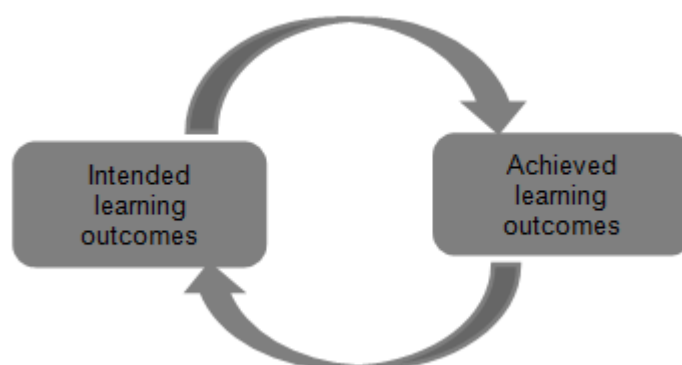
Ref: Defining, writing and applying learning outcomes: European handbook, 2017

Consequently, organizations need to draw a specific attention on assessing the learner's outcomes and make sure that the intended learning outcomes have been achieved.

AREA: Assessment (criteria, tools, etc.)
TITLE: Integrated Assessment of Professional Competences
DESCRIPTION: The assessment of professional competences is based on the observable performance of typical work situations of a profession. The required performance should be described in the form of learning outcomes, containing a content and a behavioural component, e. g. "to assist clients to form relationships with others" or "to give reasons for work processes and results".
Guiding principles for the development of competence-oriented assessments of learning outcomes are:
- Performance-orientedness (i.e. the assessment refers to a complete professional task),

- Process-orientedness (i.e. the assessment refers to work processes and their implementation into professional contexts)
- Authenticity and practical relevance (i.e. the assessment approximates real work situations and processes as much as possible).

Further requirements for developing assessment instruments are:
- The assessment needs to take into account the qualification level the professional competence refers to. Qualification Frameworks are the European Qualification framework and, if applicable, national qualification frameworks (NQF).
- The assessment procedure needs to include the "complete task". That means that it has to prove the ability of planning, performing and controlling the given task autonomously.
- The assessment is the gateway between educational context and work life. So it needs to anticipate and take into account the actual requirements and conditions of the profession.

The objective of learning outcome-orientedness and close-to-reality representation of professional tasks in assessments asks for combination of different methods such as
- Written tasks
- Presentations (demonstration of typical professional issues, professional contexts or the solution of a task)
- Expert discussions (debates about professional problems and professional issues, discussion of problems, solutions and processes of problem solving)
- Simulation of a conversation (oral role play within future professional roles)
- Product (of a practical task - the creation of a professional product, e. g. a health plan)
- Work sample (practical work process - the performance of a typical professional task, e. g. providing a service)

If a learner has achieved a complex set of learning outcomes, the assessing institution should check whether it is advisable to apply an integrated assessment. The term "integrated assessment" refers to a comprehensive assessment on a set of competences and is usually applied at the end of a training programme for awarding qualifications.

- The task(s) to be performed must be complex enough and global enough to address all the professional competences required by the key activities of a profession. It does not need to combine all skills and knowledge, but address all professional competences.

  Through the accomplishment of a task, it will be assessed that the learner can mobilize and combine his/her skills and knowledge in a specific context and level of responsibility.
  - o If possible, one global task will encompass all the professional competences.
  - o If the profession will not allow one task to encompass all professional competences (since they are situational), it is important to integrate the different professional competences, and to assess that the trainee is capable of transferring his/her competences to different situations.

- It is recommended to combine the different assessment instruments, but to prefer the instrument which will be the closest to the real professional context.

- Different assessment instruments should be used for the same task. It helps to refine the competences assessment.

AREA: Educational strategies
        Other (specify)__Digital Badges
TITLE: Digital Badges to get recognition for learning
DESCRIPTION:
Supporting technology for competencies' assessment by means of digital badges at different levels:
  - To represent levels of competence achieved,
  - To support the assessment of levels of competence achieved,
  - To show skills and competences gained through different experiences for the professional profile.

AREA: Educational strategies
Other (specify)___Technology-enhanced tracking progress and engagement
TITLE: Learning analytics and recommender systems
DESCRIPTION:
Provide 'adaptive' or 'intelligent' systems featured with learning analytics and recommending functionalities, in such a way that learners are proposed courses and materials depending on their previous learning outcomes and are supported as far as meta-cognition and self-regulated learning are concerned. Prevent drop-out.

13.6 Other issues

AREA: Other (specify)_Recognition of prior learning (non-formal, informal)
TITLE: Recognition of non-formal, informal learning
DESCRIPTION:
Allow learners to provide evidence of their learning outside the formal contexts (for example during volunteering activities) and support peer discussion of own experiences, so to have them validated (and recognized) by the community and/or the teacher.

AREA: Other (specify): Immigrants
TITLE: Immigrants
DESCRIPTION: One of the challenges for Europe at the present years is the increased of immigrants and the demographic problem.
  - In an FCN curriculum training nurses how to address issues of ethno cultural diversity and discrimination should be a priority.
  - Important issues are also the improvement and monitoring of immigrants' mental health status and the prevention and best management practice of spread infections

---

AREA: Compliance with National Curricula and National Regulations
TITLE: Investigate need for prior official recognition of the proposed FCN specialization from relevant regulatory bodies at national level
DESCRIPTION:
In many countries, the successful completion of the postgraduate diploma usually confers official recognition and registration in a country specific register of 'community nursing'. Consider therefore to take appropriate measures to ensure that the FCN specialisation is officially recognised by the competent national authorities and/or relevant other regulatory bodies.

AREA: Compliance with National Curricula and National Regulations
TITLE: Need to seek prior authorization and approval of specialization from competent national authorities
DESCRIPTION: To run a new postgraduate programme or specialization in a regulated profession such as Nursing may require prior "legal" authorization and approval of the course from relevant national competent authorities in the field e.g. nurses orders in certain countries, or other professional regulatory bodies.
Be aware of the current state-of-play in your country, as many are currently adapting their nursing programmes to strengthen the role of community nursing and have recently launched new educational initiatives in this field.

AREA: Other (specify)__Personalization
TITLE: Multi-modal contents to allow personalization
DESCRIPTION:
Provide multi-modal contents to meet different learning styles. This calls again for teachers' training actions and can turn out to be expensive in terms of time required to design new materials. In this sense, initiatives aimed - on the one hand - to foster teachers' sharing and – on the other – to the creation of databases for materials oriented to FCN education are advisable.

AREA: Other (specify)__Self-regulation of the learning process
TITLE: Self-regulated learning and learners' autonomy
DESCRIPTION:
Self-regulated learning abilities as well as autonomy, activeness and adaptiveness cannot be given for granted (Jarvela, 2006). Thus, adequate strategies and technological tools should be used to promote these abilities.

AREA: Other (specify)____Contextualized active learning tasks
TITLE: Learning activities relevant to learners
DESCRIPTION: Propose active learning activities (both individual and collaborative) that are meaningful and relevant to learners (for example through case studies) driven by their interests and allow learners themselves to be active in proposing and initiate activities.

AREA: Other (specify)__Open content
TITLE: Open educational resources
DESCRIPTION:
Promotion of freely accessible, openly licensed text, media, and other digital assets that are useful for teaching, learning, and assessing as well as for research purposes.
Use of open content in terms of open courseware/open educational resources in order to allow the sharing and the re-use of the learning material.
Use of Open Source technology enhanced learning environment to support the learning activities.

AREA: Other (specify)_- Eligibility to programme
TITLE: Eligibility criteria to FCN programme
DESCRIPTION: Be sure to define the eligibility criteria to participate in the FCN specialization, as in several countries it requires a Bachelor degree in Nursing, authority to practice as a nurse (registered nurse) and at least 2 years of relevant prior work experience (e.g. primary care, community setting).

AREA: Other - teacher and tutor
TITLE: teacher and tutor
DESCRIPTION: The training of Italian nurses is still to date "hospital centered" (acute care) and often the teachers do not have adequate knowledge and experience on primary care. The role of the family nurse is little known, and its activities are present in a spotlight of leopard and in non-uniform ways in the healthcare services. FCN in our country is not very well known and its activity is not widespread. It is therefore difficult to identify contexts in which students can observe and participate in the family nurse's own activities
For all the reasons described above, it would be important to orient the teachers in order to be sure that they have a vision of the role and of the context in which the FCN operates. It would be also advisable to identify FCNs as teachers with concrete experience in the field , possibly using conventions, and to identify experts. Apprenticeship tutors should be family nurses with experience gained in the field.

14. Annex 3: Current FCN curricula analysis: suggested competences best targeted by WBL

Spain: Commitment, Conception of people holistically, management of care and services at the household and community level, manage sentinel networks of epidemiology, monitoring and longitudinal care, respond effectively to the needs of people with chronic diseases, Ensuring continuity of care, management and coordination of available human and material resources, To promote the operation of multidisciplinary teams.

Portugal: Select the target population/group; Identify and characterize the target population/group needs, Accomplish the health planning process in clinical context, To be able to apply in clinical practice, Develop decision-making in clinical practice, Based on empirical evidence, complying with clients' values and considering the available resources, Acquire knowledge that enhance communication skills and interpersonal relationships within the community intervention, Addressing the role of partnerships and leadership on health in different contexts of human action, Develop the profile facilitator of creative expression, To understand the importance of clinical supervision to the quality of care and development of competences, To understand research as a social process for transformation of knowledge.

Sweden: Extensive communication ability and nursing education skills through independently advising and teaching patients, personnel and students is important, and also being able to carry out health discussions, motivating dialogues and intervening talks at the individual and group level, use information and communication technology as a support in work, and maintain a verbal and written dialogue with different target groups at the public level.

Norway: Working independently, Collaboration, A combination of nursing studies and specialist studies that gives the public health nurse a special competence in information, counselling and supervision to parents, children, adolescents, young people, groups and local communities, The ability to discover, support and supervise children, adolescents and young people in need of special follow-up because of illness, decreased functional competence, abuse and/or neglect or risk for this, A high level of competence for collaboration, having many collaborators in the municipality, both at individual and systemic levels. The closest collaborators are physicians, midwives, physiotherapists, personnel in child welfare, pedagogical psychological service, nursery school and school,

UK: Skills in negotiating, coaching, teaching and supporting people and their carers, whilst effectively collaborating with other agencies and services involved in enabling people to remain safely in the community, Assessing and managing unpredictable situations flexibly and responsive, Coordinating care, whether anticipated or unscheduled, with individuals and their families, through acute illness, long term and multiple health challenges and at the end of life, Working collaboratively and creatively with colleagues in General Practice, social care, community pharmacy, nursing specialisms, allied health professions and others to improve the health and care of individuals, families and communities, particularly the most vulnerable, Ongoing management of people with multiple pathology and long term conditions

Belgium: The efforts will be directed towards the whole population, whether it be with a community, a group, a family or an individual, Actions are based on integration of knowledge in nursing and community health, Communication function, Management function

Cyprus: To independently identify the required nursing care using theoretical and clinical knowledge and to design, organize and provide nursing care., Cooperate

effectively with other actors in the health sector, including participation in the practical training of health personnel, Encourage individuals, families and groups to adopt a healthy lifestyle and self-care, Immediately implement life-saving measures and take action in crisis and disaster situations, Provide independent advice to people in need of care and their relatives, guide and support them, To independently ensure the quality of nursing care and evaluate it, To communicate in an analytical and professional manner and to cooperate with other professionals in the health sector,

Estonia: The structure of study programme must support the mobility of students, the recognition of prior learning and professional experience. Studies must be undertaken in the forms of contact learning, work practice and independent work.

Greece: The management of organizations and institutions that provide health care services, The confrontation of life threatening and dangerous situations, The curriculum of the post-graduate studies program "Primary Health Care" includes mandatory and elective courses-classes and a workshop. The program requires the completion of 120 credit units (European credit transfer and accumulation system, ECTS), The treatment of the community, the framework of psychiatric care, the meaning and significance of the mental illness stigma in community psychiatric care, psychiatric reform in Greece and in the world, intermediate psychiatric care structures and intercultural psychiatric care. The role of the mental health nurse in community psychiatry and context care services it can offer,

Ireland: Safe and informed nursing practice in emergency, acute and chronically ill, palliative and terminal, patient care settings, The application of general nursing principles to special client groups and practice settings including maternity, child care/paediatric, mental illness/psychiatry, learning disability and older person care settings, Development of interpersonal and communication skills essential to the nurse practitioner, Communicating/ interacting, Communication techniques, Establishing effective professional relationships with clients and family/ friends, Process of communicating nursing information verbally and in writing, Information/ communication systems and technology, Introduction to the nursing responsibility and practice in relation to people with learning/ physical disability, Measuring health and identifying the health needs of individuals, groups and the public, Creating a work environment, which supports education to include learning, commitment to developing and maintaining standards of nursing care. Self-directed learning skills, clinical reasoning/ problem-solving skills, decision-making skills in nursing as the foundation for VET, maintaining competency and career development

Finland: The institutions decide independently on the detailed content and structure of their degrees. Nursing and public health nursing studies must include basic studies, professional studies, elective studies, a bachelor`s thesis and supervised clinical practises. In postgraduate studies, students acquire modern management skills to function in changing health care systems. Prepared nursing leaders have evidence-based nursing expertise and the ability to develop patient-safe, -centric, and health-promoting, nurturing health care management, planning and research positions. Develop anticipated customer-centered nursing and service systems to meet the health needs of the population. Apply and develop evidence-based activities in the development of nursing, nursing staff, work community and leadership**.** Evaluate and promote leadership and the work community's appeal by applying methods of evaluating and developing performance, performance and economy seems to be an expert in the social debate and development of nursing and social and health care management

A detailed table about the collected data is available at
https://drive.google.com/open?id=1jZb2iuLzHM5hMqK05Rzhv6eaIwmecHVF

15.   Annex 4: Key questions relevant to developing and implementing validation of non-formal and informal learning

Key questions on implementation of validation

- Has the purpose of the validation initiative been clarified?
- How does the validation initiative respond to the interests of the individual citizen?
- Have steps been taken to coordinate and target guidance and counselling services?
- Are mechanisms for coordination of relevant stakeholders in place, to avoid fragmentation and ensure a coherent approach?
- Are validation arrangements linked to national qualifications frameworks and how does this impact transparency and access?
- Do the outcomes of validation refer to the same or equivalent standards as those used for formal education and how does this affect its value and currency?
- Are validation arrangements linked to quality assurance arrangements and how does this influence trust and credibility?
- Which steps have been taken to strengthen the professional competences of validation practitioners?
- What is the role of validation in education and training systems; in relation to the labour market; and in the voluntary sector?
- Which tools and instruments can be used (and combined) for identification, documentation and assessment of learning?

Key questions on the basic features of validation

Distinction should be made between the different purposes served by validation and the different phases involved. The following questions provide a starting point for this clarification:

- Has the purpose of the validation been clearly defined and communicated?
- Have the different phases of the validation process been clearly defined and communicated to the individual candidates?

Key questions on identification

For the identification phase, the following questions need to be asked:

- Which procedures and tools support identification?
- How are standardised and dialogue-based identification approaches mixed and balanced?
- How is guidance and counselling supporting and integrated into the identification phase?

Key questions on documentation

For the documentation phase, the following questions need to be asked:

- What criteria are used for admitting evidence into the process?
- What formats are used for documenting non-formal and informal learning?
- To what extent do existing documentation formats support the transfer and portability of acquired knowledge, skills and competences?

Key questions on assessment

For the assessment phase, the following questions need to be asked:

- Are assessment tools adapted to the individual's needs and characteristics?
- To what extent have assessment tools been chosen according to their reliability and/or validity?
- Which reference point (standard) is being used and how suitable is this for capturing the individual variation characterising non-formal and informal learning?
- Have the conditions for assessment been clearly defined and communicated in terms of procedure, tools and evaluation/assessment standards:
  - to the candidates?
  - to employers and education institutions?

Key questions on certification

For the assessment and certification stages, the following questions need to be asked:

- How is the credibility of the authority/awarding body assured?
- To what extent can the outcomes of validation (documents, portfolios, certificates, etc.) be exchanged into further education, job opportunities?

Key questions on individuals' rights and obligations

The individual is at the focus of validation processes and his/her rights and obligations must be treated with care and respect. The following questions provide a starting point:

- Is the privacy and personal integrity of the candidates protected throughout the validation process?
- Have explicit procedures been put in place to guarantee confidentiality?
- Have ethical standards been developed and applied?
- Are the outcomes of the process the exclusive property of the candidate?
- If not, which are the implications?

- What arrangements have been put in place to guarantee fair and equal treatment?

Key questions on information, counselling and guidance

The following questions provide a starting point when considering the delivery of guidance and counselling for validation:

- To what extent can existing career guidance and counselling services, for example in education and training, labour market and social services, be mobilised to provide information and advice on validation?

- How can existing career guidance and counselling service networking be improved to address all potential target groups for validation?

- What kind of coordination mechanism is used to ensure that candidates are served where they live, study and work?

- How can public and private stakeholders cooperate to offer better information and advice on validation?

- Are guidance services providing information on the costs and benefits of validation?

Key questions on coordination of stakeholders

Coordination of validation must primarily take place at national level, addressing the complex division of roles and responsibilities between public, voluntary sector and private stakeholders. The following questions can be asked:

- What validation arrangements exist and what is their legal and political basis?

- Which stakeholders are involved?

- Have single or multiple legal framework(s) been put in place?

- What administrative processes are in place (contact and information procedures, recording and monitoring of results, shared quality assurance arrangements)?

- How are stakeholders at different levels related to each other and networking?

- To what extent is validation reaching citizens where they live, work and study; how can coordination improve current situation?

- Who is responsible for coordination at regional and local level?

Key questions on national qualifications systems and frameworks

National qualifications frameworks are now being implemented across Europe. These frameworks may aid introduction and integration of validation. The following questions point to some key issues to be addressed:

- Are validation arrangements (all, only some) seen as an integrated part of the national qualifications system and as a normal route to qualifications?

- What is the relationship between validation and the national qualifications framework (NQF)?
- To what extent can validation be used to support progression between all types and levels of qualifications in the NQF?
- Is there a link established between validation and (possible) credit transfer and accumulation arrangements?

Key questions on to standards and learning outcomes

- Do qualifications awarded on the basis of non-formal and informal learning refer to the same or equivalent standards as those used for formal education and training?
- If not, which other standards are used and how do they relate to formal standards?
- Are standards written in learning outcomes?
- If not, what are the implications for validation?
- Who developed the standards and in reference to which sources (education or occupation)?
- Are there feedback mechanisms in place to ensure review and renewal of standards used for validation?

Key questions on quality assurance of validation

- Have explicit and integrated quality assurance measures been put in place for validation; if existing:
    - Do these measures reflect an explicit and agreed quality strategy?
    - How does the quality strategy address key objectives like reliability, validity and credibility of the process?
    - Who participated in the defining this quality strategy?
    - Who are involved, at different levels, in implementing this quality strategy?
- How are quality assurance arrangements divided between internal and external assurance and control?
- Are processes and outcomes being monitored and has a system for feed-back from users/customers been put in place?

Key questions on validation practitioners

- What requirements, if any, have been set for:
    - counsellors and guidance personnel?
    - assessors?
    - other practitioners involved with validation?
- Is there a strategy in place for the professional development of these practitioners?

- Is the professional development of validation professionals coordinated between different sectors and arrangements?
- Can a community of practice for validation professionals be developed, supporting networking and professional developments?

Key questions on validation in and for education and training

The following questions are important when addressing validation in the context of education and training:

- Is validation offered in all parts of the education and training system?
- Do validation arrangements in the different parts of the education and training system build on similar or differing principles?
- Can validation arrangements in the different parts of education and training 'work together' and facilitate progress across types and levels of education?
- Is there a link between validation and credit transfer arrangements?

Key questions regarding on educational resources

The following questions are important when addressing open educational resources:

- Are the methods for validating learning outcomes acquired through OERs the same as for learning outcomes acquired in a different way?
- How are internal credits (e.g. badges) taken into account by validation?

Key *questions* on validation in enterprises

The following questions are important when addressing validation in enterprises:

- Can competence assessment carried out in enterprises be used outside the enterprise in question?
- To what extent can increased networking support further development of methods and standards for competence assessment?
- How can methods for competence assessment be made more accessible for SMEs?
- How can competence assessment in enterprises be made available for a wider range of employees;
- Can there be a stronger link between validation in the public sector
- And competence assessment in enterprises?

Key questions on skills audit

The following questions are important when addressing skills audit:

- What identification and documentation arrangements exist

- For people seeking employment or at risk of losing their job?

- Can existing approaches be better coordinated?

- How can public and private sector stakeholders cooperate?

- What are the appropriate methods; how to balance the need for dialogue and standardised testing?

- How can the outcomes of skills audit be made visible and credible

- To employers and others who receive them?

Key questions on validation in the voluntary sector

The following questions are important when addressing validation in the context of the voluntary sector:

- In which cases should validation be limited to identification

- And documentation; in which cases should validation apply assessment and certification in a summative approach?

- How can the validation initiatives in the voluntary sector interact with and strengthen arrangements in the public sector, particularly in education and training?

- Which assessment standards used in the voluntary sector could be complementary with formal education and training systems?

- How can the voluntary sector ensure reliability and recognition of their existing validation tools?

Key questions on validation tools

Before the validation tool can be selected it is important to look at the learning to be assessed. It is generally accepted that the following criteria need to be considered:

- purpose of the validation process;

- breadth of knowledge, skills and competences to be assessed;

- depth of learning required;

- how current or recent knowledge, skills and competence are;

- sufficiency of information for an assessor to make a judgement;

- authenticity of the evidence being the candidate's own learning outcomes.

16. Annex 5: The Four Phases of RPL according to the Cedefop (2015) – Draft Process for ENhANCE

	Formal Learning	Non-formal and informal Learning	ENhANCE
1. Identification	- General information about the RPL system is in place (precondition) - Identification of interfaces between the present curriculum and (obviously) related curricula and certificates (e.g. diplomas - Information on curricula on which the certificates are based, at best from widely recognised or public institutions = recognition authorities*	- Identification of possible/useful entry points or possible "upgrading scenarios" - identification of competencies obtained through informal or non-formal learning	- examining the possibility of cooperation with recognition authorities etc. - identification of degrees or certificates that are associated with competencies that can be obtained through formal learning and/or are likely to be expected from applicants with a formal nursing degree with regard to Output 2.2 - identification of competencies obtained through informal or non-formal learning - generally applicable interfaces in the FCN-curriculum to be identified
2. Documentation	- providing relevant information to applicants - providing and using templates, if obligatory and/	- The steps of the process are clear and transparent (guiding principle) - using appropriate formats/methods for documenting non-formal and informal learning,	- The steps of the process are clear and transparent (guiding principle) - providing defined templates for a formal

	or defined	e.g. questionnaires, portfolios, simulations, proof of work, learning diaries, standardized document analysis, etc. - Guidance: Training-programmes for self-management of competences (designing, filling and managing one's portfolio)	learning recognition and validation process - providing suitable identified formats/ methods for documenting non-formal and informal learning in the field of FCN, possible elements: - individual evaluation (e.g. a portfolio that can be updated) - collection of prior learning evidences within the Open Online Tool - comparison with the requirements - implementing of these instruments/ processes in the Curriculum
3. Assessment	- The steps of the process are clear and transparent (guiding principle) - following exactly the documentation/ procedures to assure the proclaimed compatibility or congruence	- again: The steps of the process are clear and transparent (guiding principle) - assessor reviews the evidence/ portfolio submitted - use of validated procedures/ tools - (Final) assessment (e.g. test or demonstration)	- The steps of the process are clear and transparent (guiding principle) - Adjusting assessment tools - Involvement of own experts/ local certification bodies/ certification authorities (esp. for the assessment of formal learning) - Validation of new procedures/tools if necessary

4. **Certification**	- granted by or in the name of recognition authorities	- Decision on the final assessment and information on shortcomings, if applicable (and potential re-skilling, mentoring etc. for another assessment) - Award of qualification/ certificate/ credits/ units/ exemptions	- awarding the congruence with already recognized/ certified degrees - award of qualification/ certificate/ credits/ units/ exemptions

Table 2: Validation of prior learning: The four phases in the two main fields and the implementation in ENhANCE

* Examples for recognition authorities (formal):

- Belgium: Consortium de validation des compétences

- Gemany: Universities, Chambers of Crafts, Industry, Commerce and Farming, Federal state level institutions

**Examples for recognition authorities (formal, non-formal, informal):

- in general: professional bodies that assess and recognize qualifications in their field of expertise, employers' representatives, industry councils, training providers and boards, universities/colleges, regional/local authorities

***Detailed examples to be found in the Annex 3.

17. Annex 6: Country examples for RPL procedures

UK, Middlesex University (from Garnett/ Cavaye 2015, 32ff)

The accreditation work of the University is managed by the Middlesex University Accreditation Services, part of the Institute for Work Based Learning (WBL). The University Quality Assurance Committee approves the university accreditation procedures and receives an annual report on the work of the Accreditation Services. Accreditation proposals follow a standard university format and assessor recommendations are considered by the University Accreditation Board that is responsible for agreeing credit rating of the accredited activity and the award of credit to individuals. The external examiner to the University Accreditation Board has oversight of the process by which credit is assigned to accredited activity and subsequently to individuals on accredited activity. Activity accredited at UK Level 5 or above will be aligned to an eternal examiner appointed to a University programme or appointed specifically to examine work from one or more accredited activities. Accredited activities seeking the award of Middlesex credit to individual participants will enter into a memorandum of co-operation with the University and be allocated a University Accreditation Link Tutor. The Link Tutor is involved in the assessment process and in the production of an annual monitoring report. The main use of accreditation of prior learning from experience at Middlesex University is as part of a negotiated programme of Work Based Learning (WBL) (Garnett et al., 2009). WBL is learning that is through, at and for work. Middlesex pioneered the development ofWBL at higher education level in the early 1990s and won a Queens Prize for "Excellence and Innovation" in this area in 1996. Further development of WBL has been commended by QAA audits in 2003 and 2009. The success of the Middlesex approach has resulted in the award of a centre for excellence in teaching and learning to Middlesex in the field of WBL. The University established the Institute for WBL in 2007 to strategically develop WBL as a resource for the whole University and in 2009 received an £8million award from the Strategic Development Fund of the Higher Education funding Council for England to develop work aimed at employer engagement. The Middlesex approach to WBL (irrespective of the level of programme) focuses on four key stages:

(a) The common starting point for most WBL programmes is a forward focused review to establish what relevant knowledge/skills the individual brings to the programme (this can lead to formal accreditation via RPL). The Middlesex focus on the facilitation of learning review leading to general credit has moved the traditional RPL process from its limitation of only recognising learning that closely matches existing validated programmes (Garnett, 1998). This is highly significant as it provides for fuller recognition of the learning achievement of learning (from experience or taught) which is external to the University and hence leads to enhanced customisation of higher education programmes.

(b) After the individualised starting point for the higher education programme has been established, a planning stage takes into account stakeholder interests and requirements as well as resources (e.g. of time, information, materials) (Garnett, 2000) to produce a customised programme. This programme demonstrates coherence and progression from learning identified and certified by the RPL to a work-based programme designed to not only meet the academic requirements of the University and also to be of value to an employer or client.

(c) A key input from the University into such a work-based programme is to equip the work-based learner with appropriate research and development skills to undertake real life projects that are focused on knowledge creation and use.

(d) The work-based projects are often the focal point of the work-based programme and have the potential to impact upon the workplace by making the case for or bringing about change (Garnett, 2005).

The case of "Ben" from a major construction management company illustrates the role of recognition of prior experiential learning in the customised WBL provision of Middlesex University. Ben was referred to the University by his employer; while he was recognised as the company expert on project management of design and build contracts, the company was unclear what he actually knew and was able to do. The challenge for the accreditation of prior experiential learning was to draw out what Ben knew and not restrict this process by seeking only a very close matching exercise with existing University subject-based modules. Ben worked with a university adviser to put together a RPL portfolio following a standard Middlesex University format. The RPL portfolio includes a curriculum vitae (resume) extended to focus upon key learning episodes (e.g. the first time Ben managed a project outside the UK) and a current job description that focused on the knowledge and skill requirements to perform the job. These documents served as the basis for advising on the development of his claim, helped to focus him on differentiating between describing the experience and identifying the learning from experience, and served to put the accreditation claim in context for the assessor.

The heart of a portfolio is a number of claimant-defined "Areas of Learning". For each area, the claimant will identify a title and explain how they acquired knowledge and skills in the area (often this will be a combination of short training courses and learning through carrying out a work role). The claimant is required to clearly identify what it is that they know and are able to do (i.e. their claim for knowledge and skills) and, crucially, to provide evidence for this claim to learning achievement. Ben claimed for learning achievement in areas of learning relating to commercial awareness, design and build contracting and project management (including knowledge of legal procedure, management of resources and management of people) and was able to draw upon a range of evidence including tender documents,

project plans, reports to clients and photographic evidence supported by explanatory text and line manager statement.

As a result of the RPL process, Ben was awarded academic credit at postgraduate level. Upon this basis the University gave Ben the opportunity to negotiate a workbased programme of study at Masters level. The Middlesex University WBL Framework allowed Ben to build upon the learning from experience and achieve a customised Masters in WBL Studies (Construction Management) following the successful completion of modules in programme planning, work-based research and developments methods, and a major project. The project resulted in the creation of a handbook for project managers engaged in design and build projects that was taken into use across the organisation. Without the combination of RPL and negotiated WBL Middlesex University would not have been able to contribute to Ben's CPD nor would Ben have had the opportunity to gain a Masters qualification. The University has extended this approach to qualifications at undergraduate, postgraduate and doctoral level.

France (classified as country with a high degree of development by Cedefop) (from Hawley/Souto Otero/Duchemin 2010, 6f and Duvekot/Halba 2014)

Validation of prior learning has been established as a right for every citizen in France. The current system (Validation des Acquis de l'Expérience, VAE), which was established in 2002, is used to deliver whole or partial qualifications. Each body awarding qualifications has developed its own rules for the context-specific implementation of the principles outlined in the legislation.

The VAE system stems from legislation introduced in 1992 for qualifications awarded by the Ministries of Education and Agriculture, extended to qualifications delivered by the Ministry of Youth and Sport in 1999, and to all main types of qualification in 2002. The most recent change in 2009 aimed to increase the number of individuals accessing the VAE process, in particular private sector workers, and to develop guidance for VAE.

Since 2002 a significant investment has been made in the higher education sector in particular to produce standards (référentiels) described in terms of learning outcomes in order to facilitate VAE (all vocational training diplomas included in the national qualifications directory (RNCP) must be described in terms of learning outcomes). In addition, in higher education, recognition of professional experience has also been used for a long time (in fact it dates back to the 1930s) to allow access to individuals who do not meet formal requirement criteria and, in some cases, acquisition of a diploma.

The number of VAE candidates per year is high in comparison to most other European countries, with 53,000 in 2008. The number of qualifications awarded through VAE in this year was between 72,000 and 75,000.

The main organisations in charge of implementing VPL in France, on the ground, are: the Association for Vocational training for adults (AFPA) (http://www.afpa.fr/) ; the National Employment Agency (http://www.pole-emploi.fr); the VPL network among Universities (http://francevae.fr/) ; the regional councils (26 in France) responsible for Employment and Training (list provided on: http://www.arf.asso.fr/); the Chambers of Commerce also proposed supports for candidates to VPL (http://www.cci.fr/) ; some Ministries are directly involved in VPL such as the Ministry for Education and Higher Education (http://www.education.gouv.fr), a special organisation called GRETA is also responsible for VPL among the National Education ; another Ministry involved in the VPL process is the Ministry for Labour , Employment, Vocational Training and social Dialogue (http://travail-emploi.gouv.fr/) ; training bodies such as Astrolabe provides training for target groups with special needs.

On a microeconomic level, the information for VPL candidates is accessible mainly after an interview with a counselor at the National Agency for Employment or at the Cité des Métiers. It is not very accessible without any support from a professional in the first place. The information through Internet may be very administrative and the presentation may be partial or unclear for a candidate. Especially the information provided by the CNCP is not so easy to understand or use. The individuals may also obtain support from other candidates to VPL they have met in a professional context but also a family context or social context (association for instance) and from trainers in the training bodies they are paying to support them in the process.

Portugal (classified as country with a high degree of development by Cedefop) (from Hawley/Souto Otero/Duchemin 2010, 7f)

In Portugal, the national system of validation is one part of the strategy to reduce the qualifications deficit among the adult population, notably through the New Opportunities initiative launched in December 2005.

In 2001 the National System for the Recognition, Validation and Certification of Competences (SNRVCC) was created. The Recognition, Validation and Certification of Competences (RVCC) now represents an important part of the measures in place to meet the goals of the New Opportunities initiative. New Opportunities defines a strategy for national education and training in Portugal, aiming to raise the qualifications level of the population to secondary level (12th grade).

In higher education, recent legislation allows access to adult students who do not meet the standard admissions requirements based on the recognition of prior learning.

According to data from the National Agency for Qualifications (ANQ), by April 2010, 324,370 adults had been granted a certificate through RVCC processes (i.e. as a result of validation processes and complementary learning).