# ERASMUS PLUS 2015 SECTOR SKILLS ALLIANCES AGREEMENT No. 2015 – 3212 / 001 – 001 PROJECT No. 562634-EPP-1-2015-IT-EPPKA2-SSA



Deliverable Number:	M.6.3
Title of Deliverable:	Overall evaluation report about pilots' implementation
WP related to the Deliverable:	6
Dissemination Level: (PU/PP/RE/CO)*:	
Nature of the Deliverable: (R/P/D/O)**:	
Actual Date of Delivery to the CEC:	

PARTNER responsible for the Deliverable:	UVa-Edu
WP starting month	M20
WP ending month	M30
Partner Contributor(s):	UVa-Edu
Partner Reviewer(s):	

### Funded by the Erasmus+ Programme of the European Union



*Dissemination Level:	<b>**Nature of Deliverables:</b>
PU=Public	R=Report
CO=Confidential, only for members of the Alliance (including Commission Services).	P=Prototype
PP=Restricted to external subjects in confidential mode (including Commission Services)	D=Demonstrator
RE=Restricted to a group specified by the Alliance (including Commission Services).	O=Other



## **1 ABSTRACT:**

This report delves into the evaluation of the CARESS pilots carried out in Finland, Italy and Spain between December 2017 and March 2018. This evaluation is intended to assess the quality and the efficacy of the three main dimensions of the CARESS pilots (face-to-face, e-learning and CARESS VCP). This milestone explains the methodology that has been followed for the evaluation (guided by the EREM evaluation framework), describes the authentic learning scenarios within the pilots, and discusses findings that came out during the analysis of the data obtained during the realization of the pilots. Finally, the report wraps up the global conclusions of the evaluation.

### 2 KEYWORDS:

Evaluation, CARESS pilots, formal non formal and informal learning

# 3 LIST OF BENEFICIARIES (PP-RE)/PARTICIPANTS (PU-CO)\*\*\*

Ben. No.	Beneficiary Name	Short Name	Country
1	Si4Life – Scienza e Impresa Insieme per Migliorare la Qualità della Vita s.c.r.l.	Si4Life	Italy
2	Regione Liguria	Liguria Region	Italy
3	GGallery s.r.l.	GGallery	Italy
4	I.T.C. "Vittorio Emanuele II-Ruffini"	VE-II	Italy
5	AGE-Platform	AGE	Belgium
6	OMNIA	OMNIA	Finland
7	Finnish National Board of Education	FNBE	Finland
8	Super	SUPER	Finland
9	Ayuntamiento de Valladolid	ΑΥΤΟ	Spain
10	Universidad de Valladolid	UVA	Spain
11	Sociedad de Geriatría y Gerontología de Castilla y León	SGGCYL	Spain
12			
13			
14			
15			
16			



\*\*\* List of Beneficiaries

In case of dissemination level PU or CO please indicate all the partners involved in this Deliverable.

In case of dissemination level PP please indicate the names of the other subject to whom the deliverable is devoted

In case of dissemination level RE please indicate the restricted group of partners.

### **4 VERSION HISTORY and AUTHORS**

VERSION	PRIMARY AUTHOR	VERSION DESCRIPTION	DATE COMPLETED
1	Sara Villagrá-Sobrino Estefanía Arribas-Leal	V1-Draft	15/03/2018
1	Jenni Numistro OMNIA	Comments V1-Draft	5/04/2018
2	Sara Villagrá-Sobrino Estefanía Arribas-Leal	V2-Draft	26/04/2018
3	Sara Villagrá-Sobrino Estefanía Arribas-Leal	Final version	30/04/2018

SECTION	AUTHORS	PARTNER TYPE	NAME OF PARTNER
3.2.5	Francesca Ferrando		GGALLERY



# 5 Table of Contents

1	AB	STRA	СТ:	2
2	KE	woi	RDS:	2
3	LIS	T OF	BENEFICIARIES (PP-RE)/PARTICIPANTS (PU-CO)***	2
4	VE	RSIO	N HISTORY and AUTHORS	3
5	Tak	ole of	Contents	4
1	ΙΝΤ	ROD	UCTION	7
2	EV	ALUA	TION METHODOLOGY	7
	2.1	EVA	LUATION FRAMEWORK	7
	2.2	DAT	A SOURCES AND EVALUATION GOALS	7
	2.3	EVA	LUATION CONTEXT	12
	2.	3.1	Deviations from the Evaluation Plan described in D.6.2	13
	2.	3.2	Finland pilot	14
	2.	3.3	Spanish pilot	15
	2.	3.4	Italian Pilot	15
3	FIN		SS AND EVIDENCE	16
	3.1	Тор	ic 1: Instructional design of the VET courses	18
	3.	1.1	Results: Italy, Spain and Finland	18
	3.2	Тор	ic 2: Participation and students' performance	27
	3.	2.1	Italy	27
	3.	2.2	Spain	29
	3.	2.3	Finland	31
	3.3	Тор	ic 3: Teacher's competences and skills	32
	3.	3.1	Italy	32
	3.	3.2	Spain	35
	3.	3.3	Finland	37
	3.4	Тор	ic 4: Quality and usefulness of training materials	
	3.4	4.1	Italy, Spain and Finland	
	3.5	T5:	Non formal and informal learning through CARESS e-learning platform and VCP	42
	3.	5.1	Results: Italy, Spain and Finland	45
	3.6	Wra	apping up the CARESS pilots' evaluation	52
4	AN	NEXE	S	53
	4.1	Anr	ex 1. PILOT DESCRIPTION TRACKING TOOL	53
	4.2	Anr	ex 2. STUDENT LEARNING PACT TEMPLATE	54
56	2634	I-EPP	-1-2015-IT-EPPKA2-SSA CARESS Project	4 of 65



4.3	Annex 3. TAM QUESTIONNAIRE VCP	61
-----	--------------------------------	----

#### TABLES

Table 1 Number of informants and data gathering techniques in the Finnish pilot	15
Table 2 Number of informants and data gathering techniques in the Spanish pilot	15
Table 3. Number of informants and data gathering techniques in the Italian pilot	16
Table 4. Data sources and labels used to quote them along the text	17
Table 5 Teachers' initial questionnaire (FIN, SP, IT)	23
Table 6 Results students' initial questionnaire. Finland (FN), Italy (IT) and Spain (SP)	26
Table 7 Students' initial questionnaire	28
Table 8 Students' final questionnaire (SP)	31
Table 9 Students' final questionnaire (FIN)	32
Table 10 Teachers' final questionnaire (IT)	34
Table 11. Teachers' final questionnaire (SP)	36
Table 12 Students' final questionnaire	37
Table 13. Teachers' questionnaire: Satisfaction and impact of the learning materials. Results from Fin         Spain and Italy	
Table 14 Students' satisfaction and experience CARESS integrated platform	49
FIGURES	
Figure 1. Graphical representation. CARESS Pilots' evaluation	8
Figure 2 Graphical representation of the research questions, issue, topic and informative questions during the evaluation of the quality and efficacy of CARESS pilots.	
Figure 3. Graphic representation of the data gathering and analysis techniques flow during the evalu of CARESS pilots	
Figure 4. Informants and data sources. Pilots' evaluation	18
Figure 5 Designing a compensative learning module using the ILDE	19
Figure 6. Results Finland, Spain and Italy. Teachers' questionnaire evaluating the learning materials	39
Figure 7. Results Finland, Italy and Spain Students' assessing the learning materials used in the fac face sessions	
Figure 8 Results Finland, Italy and Spain. Students' questionnaire evaluating the e-learning materials .	41
Figure 9. Screenshot CARESS integrated platform. Thematic/ Transnational group discussion. Finland, and Spain	•
Figure 10. Participants' age	45
Figure 11 Educational background	45
Figure 12 Educational background	46
Figure 13. Knowledge quality	47
Figure 14 Service Quality	47



Figure 15. Perceived usefulness	48
Figure 16. Perceived ease of use	48
Figure 17. Satisfaction	49
Figure 18. Knowledge and sharing behaviour	50



### **1 INTRODUCTION**

The purpose of this document is to show the evidence gathered from pilots' design and enactment within the three main dimensions of the CARESS pilots (face to face, e-learning, and VCP) carried out in Finland, Italy and Spain, with the aim of assessing their quality and efficacy. Likewise, the analysis carried out is framed within the Responsive Evaluation Model approach (Jorrín Abellán, 2009; Stake, 2006), which is described in depth in D.6.2.

This report is structured as follows. Section 2 provides a general description of the evaluation methodology, the data sources, the participants and the data collection techniques used within the evaluation process according to the evaluation timeline described in D6.2. It is worth noticing that in our case, the factors that impact the research question were expected to emerge and evolve during the process, as a consequence of the knowledge gained by the researchers throughout the evaluation of the pilots. Thus, the different nature of the phenomena under study, led us to introduce some deviations throughout the evaluation process according to it was initially described in the deliverable 6.2. In this section, we also explained the nature of these deviations.

Given the evaluative tension "Can training courses based on competences and active methodologies be helpful to improve nurses/OSS/practical nurses clinical practice and transversal skills in elderly homecare? section 3 will be devoted to present the evaluation results, according to the indicators defined in D.6.2.

# 2 EVALUATION METHODOLOGY

### **2.1 EVALUATION FRAMEWORK**

Due to the intrinsic difficulty of the evaluation itself and the complexity of the training healthcare scenarios, it is convenient to use a theoretical framework to guide the collection of evaluation data, its analysis, and its interpretation. Specifically, we have followed the responsive evaluation framework EREM (Jorrín-Abellán, 2009). The model is oriented more to the activity, the uniqueness and the plurality of the evaluand. Its design is slowly developed, with continuing adaptation of evaluation goal-setting and data gathering while the people responsible for the evaluation become acquainted with the evaluand and its context (Prieto-Santos, 2013). In this approach, *Issues* are suggested as "conceptual organizers" for the evaluation study, rather than hypotheses or objectives. Issues are ideas about the evaluated that have tension or potential tension. Stories and/or data included in the evaluation report address the issues defined for the evaluation approach acts a boundary object (Stake, 2009), determining a model both plastic enough to adapt to local needs and constraints of the several stakeholders employing them and robust enough to maintain a common identity across different healthcare training courses and innovations to be evaluated.

### 2.2 DATA SOURCES AND EVALUATION GOALS



This evaluation has a threefold evaluand that includes: the quality and efficacy of presence courses inhome care, the CARESS e-learning platform and the acceptability and usefulness of the CARESS Virtual Community of Practice to support teachers during the enactment of learning pathways in VET scenarios. Figure 1 illustrates a graphical representation of the EREM framework applied to the evaluation process of CARESS pilots within the project.

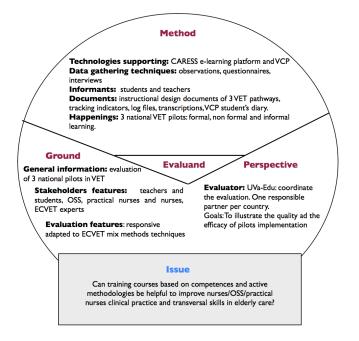


Figure 1. Graphical representation. CARESS Pilots' evaluation

Around the evaluand concept, the framework structures the evaluation design into three different facets:

- 1. Perspective (why the evaluand is evaluated), covering the main goal pursued and other significant aspects;
- 2. Ground (where the evaluand is evaluated), gathering the information about the context and the participants; and
- 3. Method (how the evaluand is evaluated), indicating the data gathering techniques and the documents that support the conclusions.

Thus, the evaluation tries to explore an evaluative tension (or Issue in EREM terminology) defined as "Can training courses based on competences and active methodologies be helpful to improve nurses/OSS/practical nurses clinical practice and transversal skills in elderly care? This issue can be explored through informative questions grouped into several topics (see Figure 2), both defined by us at the start of the evaluation, but also emergent while gathering and analyzing data in a progressive in-focus (Stake, 2010).



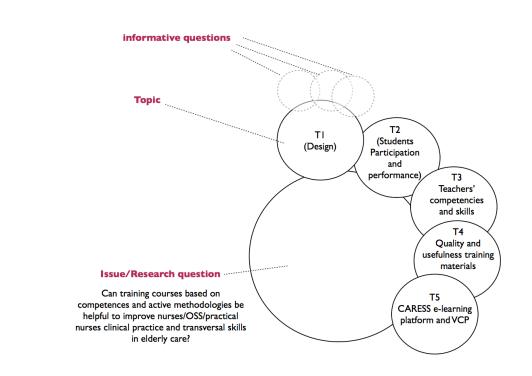


Figure 2 Graphical representation of the research questions, issue, topic and informative questions used during the evaluation of the quality and efficacy of CARESS pilots.

These topics can be exemplified by the following aspects:

**Topic 1-T1: Instructional design of the VET courses**: explores whether the course designs across countries were able to successfully fulfill the EQAVET indicators.

**Topic 2-T2: Participation and students' performance**: explores how was the students' performance during the courses within countries, as well as their satisfaction in order to overcome their learning gaps in elderly home care context.

**Topic 3-T3: Teacher's competences and skills:** explores the way pilot teachers across countries performed the courses, identifying emerging difficulties.

**Topic 4-T4: Quality and usefulness of training materials**: explore whether both teachers and students perceived the usefulness of learning materials, identifying some potential strengths and limitations.

**Topic 5-T5: Nonformal and informal learning through CARESS e-learning platform and VCP**: explores how was the students' performance and satisfaction through the CARESS e-learning platform and the virtual community of practice, as well as the effectiveness of CARESS VCP for competence recognition.

Each of those topics is in turn informed by several informative questions that try to probe for information. This conceptual organization of the data from the evaluation is adapted from Huberman & Miles's anticipated data reduction procedure (typical in qualitative data analysis) (Miles & Huberman, 1994). As it can be seen in Table 1, each topic is explored with a number of informative questions, which are finally mapped to data gathering techniques.



#### Table 1 Topics and informative questions CARESS pilots evaluation

#### T1: Instructional design of the VET courses

IQ1.1: Does the CARESS framework help to identify the knowledge, skills, and competences to reach?

IQ1.2. Does the chosen methodology uses a variety of appropriate mechanisms (e.g., content modules, links to external resources, and/or multimedia, etc.) and takes into account the student's diversity?

IQ1.3. Is the content presented using a variety of appropriate mechanisms (content modules, links to external resources, and/or multimedia, etc.)?

IQ1.4.Is the content sequenced and structured in a logical manner, which enables learners to achieve the stated goals?

IQ1.5. Is the purpose of learning activities clearly presented?

IQ1.6: Are technologies used creatively in ways that transcend traditional, teacher-centred instruction?

IQ1.7. Have the ILDE templates helped me better design the teaching lessons according to the learning outcomes, having in mind the goals, knowledge, as well as the skills and competences that should be acquired by the students?

#### **T2:** Participation and students performance

IQ2.1. Are the course activities well organize and allow interactive participation?

IQ2.2.Does the course activities enhance students' knowledge regarding job opportunities in home-care?

IQ2.3.Does the methodology chosen take into account the students' diversity and possible difficulties to be solved?

IQ2.4. Do the students feel it would be useful to incorporate the new knowledge, skills and competences learned in their future/current job practice?

IQ2.5. Are the students please with the learning materials and learning methodology provided during the course?

#### T3. Teacher's competences and skills

IQ3.1. Are the teachers motivated?

IQ3.2: What are the biggest difficulties the teachers face regarding the design and course implementation?

IQ3.3: Do the teachers have an adequate knowledge of the skill gaps?

IQ3.4: Are the lessons and activities planned well prepared?

IQ3.5: Do the teachers have enough time for developing all the learning contents of the course?

IQ3.6: What are the teachers' thoughts about the learning content and their future use?

#### T4. Quality and usefulness of training materials

IQ4.1. Does the learning materials promote student engagement?

IQ4.2.Are the learning materials visually attractive, clear and presented in a different format (i.e. videos, documents, web pages, software, open educational resources, ICT tools)?

IQ4.3. Does the learning materials took into account different ways of learning by the students (e.g.,



established different difficulty grades according to students' diversity)?

IQ4.4.Does the learning materials integrate opportunities of knowing labour market needs and skills, and provide opportunities to develop entrepreneurial mind-sets?

IQ4.5. Does the learning materials consider and integrate work-based learning?

IQ4.6.Are the learning materials suitable for a wide range of learning styles?

#### **T5. CARESS e-learning platform and VCP**

IQ5.1. Are the students able to share learned knowledge, ideas and learning materials through the CARESS Virtual Community of Practice?

IQ5.2. Are the students pleased with the use and possibilities of the CARESS Virtual Community of Practice?

IQ5.3. Does the VCP contribute to raising the Pilot's learning objectives?

A profuse set of qualitative data gathering techniques and sources were used during the evaluation (see figure 3): teachers' generated artefacts (e.g., instructional design documents of 3 VET pathways, training materials both in face-to-face sessions and in the e-learning platform), questionnaires, observations, interviews, both teachers and students' log files through VCP and the e-learning platform and students VCP diary.

In order to contribute to the quality and credibility of the study, several steps were taken, including (Saldaña, 2004): triangulation of techniques and data sources; peer-debriefing between the two researchers that analysed the data and the rest of the CARESS partners (including the discussion and agreement of the data condensation schema); close monitoring of the pilot and evaluation activities carried out and a collection of thick descriptions of the context of the study.



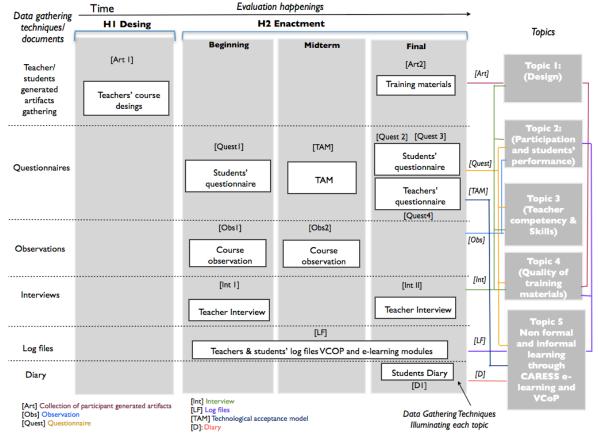


Figure 3. Graphic representation of the data gathering and analysis techniques flow during the evaluation of CARESS pilots

## **2.3 EVALUATION CONTEXT**

Three pilots, targeting different HCCPs have been carried out in Italy, Spain and Finland. Table 2 shows the timeline according to the three main components of the courses: face-to-face, e-learning and Virtual Community of Practice, among the involved countries.

Country	Face-to-face	e-learning	VCP	Target	
Spain 24 <sup>th</sup> November 2017-11 <sup>th</sup>		24 <sup>th</sup> November 2017-	24th November 2017-	Nurses	
January-2018		2 <sup>nd</sup> March 2018	2nd March 2018		
Finland	21 <sup>th</sup> November 2017-13 <sup>th</sup> December 2018	at at		Practical Nurses	
Italy 3 <sup>rd</sup> June 2017 – 15 <sup>th</sup>		18 <sup>th</sup> December 2017 –	18 <sup>th</sup> December 2017 –	Social Health	
February 2018		28 <sup>th</sup> February 2018	31 <sup>st</sup> March 2018	Operators (OSS)	

 Table 2 Timeline CARESS pilots targeting different HCCPs

Pilot coordinators provided a more flexible and real scenario aimed to better adapt the enacted pilots to their particular needs (i.e., educational system national constraints/rules, different learning environments, students' background; etc.). Therefore, as it is showed in Table 2, we should appreciate



significant differences among countries. Thus, CARESS pilots were carried out in different periods of time and involved a different number of teachers and students between countries.

Likewise, in order to better coordinate and monitor the evaluation activities, a "pilot description Tracking Tool" (see Annex 1) was developed in collaboration with both pilot coordinators and project coordinator. This instrument, available to all the partners through CARESS Google Internal Site, allowed us to have a general overview of the ongoing evaluation tasks and its status within countries. The pilot description-tracking tool includes information of the final number of the students and teachers involved in the courses, the timing of the activities carried out according to the three pilots' dimensions, as well as the progression of the evaluation tasks (i.e., the available information according to the data gathering techniques used in different moments across pilots).

Thus, pilots' coordinators were in charge of keeping update the monitoring evaluation tool track. Besides, this tool is aimed not just to help tracking the evaluation activities but for other coordinators to know the progression of the other Pilots and how are they managing the evaluation tasks.

Additionally, a template called Student training pact (see Annex 2) was developed with the aim of being internally useful for partners to better know how each pilot's peculiarities. On the other hand, the document was useful for the students that were enrolled in the courses in order to better communicate the three dimensions of the course, the aims and purposes of the Pilot as well as its assessment.

One aspect to be highlighted have been the high level of cooperation between partners to refine the data gathering instruments, which, by the time the D6.2 was released, where just a draft. Pilots' coordinators were actively engaged, providing feedback to better adapt the instruments to the specific learning environments in where the pilots were carried out. As a result, all the instruments (i.e., questionnaires, interviews, observations, etc.) have been assessed by both Pilots' coordinators and project coordinator.

#### 2.3.1 Deviations from the Evaluation Plan described in D.6.2

The instruments suffered some minor changes, generally referred at the number of the question proposed or the questions distribution (for instance, the questionnaire Annex 4 was divided in two, A and B, to facilitate the identification of the evaluation subject, as a suggestion of the Finnish coordinator).

Additionally, we took into account the workload of the participants, trying to provide a shorter instrument. Sometimes, we had to clarify some questions or eliminate instruments, when partners agreed that would not provide meaningful insights. For instance, the teachers' reflective diary and students' diary were eliminated due to the partners' agreement on gathering data from the student experience towards the VCP diary was enough to get useful information according to the project indicators.

All pilots were designed to go through three modalities of learning: formal, informal and non-formal education, as described through the deliverables from WP4.

Case studies implemented in Italy, Spain and Finland have been designed in order to combine the different types of learning in compliance with each VET the national regulation and each specific learning level. The main differences, detailed in the following paragraph, are in (i) time duration, the case study implemented in Italy is the longer, and (ii) type of learning experienced by students, i.e. Italy and Spain groups applied all the three dimensions to the same group of students, while in Finland teachers have developed three Pilot's, with different students. The deviations of the pilots' carried out in Finland are explained in depth in section 9.3 of D.4.6 and can be summarized into the following aspects:

• Pilot 1: carried out from 8/2017 to 12/2017: This pilot focused on national e-learning materials, classroom teaching and practical training. Transversal and CARESS e-learning modules, as well as the VCOP, were not available when the course started. This course allowed teachers to obtained



useful insights that were reported in D.4.6. However, we decided to not use this case for evaluation purposes due to the fact that the focus of the CARESS evaluation is to assess the pilots taking into account its three dimensions.

- Pilot 2: from 11/2017 to 1/2018: students had access to both national and transversal materials. However, The CARESS VCP started to be active in 1<sup>st</sup> December 2017. Thus, students enrolled in this pilot, according to the reasons given by the teachers, did not have enough time to take advantage of this resource. Tracking report and VCP diary has not been used in this pilot.
- Pilot 3 was carried out from 2/2018 to 3/2018. This pilot focused on transversal materials, elearning materials and VCP. Students needed five competence points so it was not possible to involve national materials in the course anymore. In this additional course, they tested the tracking report and VCP diary using them for a final assessment of the targeted competences by fostering the proper participation of students both in national discussion groups and in thematic groups. And to assess the e-learning (transversal modules), the students have worked with the elearning materials and actively participate in the two collaborative activities listed in the training student pact.

Regarding CARESS evaluation purposes, in the case of Finland, we have considered all the information obtained from the design and the enactment of Pilots' 2 and 3 described above.

Other deviations carried out have been the following:

- Use of generated artefacts for evaluation. Although it was designed to use teachers and students' artefacts, we will use only teachers' artefacts, such as some learning designs.
- Student and Teacher's diaries. Due to the workload in those pilots we will use only the VCP student diary.
- For same reasons (high workload) we only use a TAM questionnaire to evaluate the usefulness of VCP, discarding the think aloud protocol.

#### 2.3.2 Finland pilot

In Finland, pilot course target students were adult students. All of the students have passed basic studies in their practical nurse education and they are accomplishing their third and last year of studies in practical nurse education (EQF4). The Pilot course was offered in OMNIA as one option of vocational studies.

"In Finland, it is compulsory to accomplish one out of four optional vocational study course of 15 competence points in order to obtain the degree" [FIN\_T\_ART]. CARESS pilot course was part of one of these optional modules offered to students. Likewise, it was mandatory for students complete the compulsory studies before the enrollment in the CARESS pilot. Most of the adult students were recruited to the pilot course at hands of the pilots' teachers. Three pilots were developed in Finland. However, for CARESS evaluation purposes just pilot 2 and 3 will be taken into considerations for the reasons mentioned in section 2.3.1 in this document.

Likewise, 20 students were enrolled in pilot 2 and 16 in pilot 3 (N=36). Students' age varied between 18 and 51. A minority of students answered they attended the course because they were curious. Mostly did it because it was mandatory: "mandatory if I want to graduate", "I need to achieve the competence points in order to obtain my degree" [FIN\_S\_QUEST]. 7 out of 36 students affirmed to do it because they thought it could be useful for their career.

Table 1 shows the number of informants and data sources employed in the Finland pilot



Data gathering		Inform	nants	
techniques/documents	Students	Researchers	Teachers	Total
Observations	-	2	-	2
Interviews		-	2	2
Questionnaires	87	-	9	96
Generated artefacts	-	-	3	3
Students' diary	10	-	-	10

Table 1 Number of informants and data gathering techniques in the Finnish pilot

#### 2.3.3 Spanish pilot

The Spanish pilot was aimed to graduate nurses with 6 EQF level that were interested in improving their knowledge and skills in elderly home care. To attend the course previous practical experience on the field was not required.

26 in-service nurses took part of Spanish Pilot aged from 23 to 57. The majority of the students obtained a Master Thesis Degree and have many years of experience working in the National Health System. Most part have a specialization in family and community. Many of them worked in different cities far away Valladolid, where the course took place. Among the reasons to attend the course the majority did it (21) because they thought it could be useful for their career. As a student pointed "My care work focuses on an aging and adult population. A field where you can always improve." A minority of students answered they attended the course because "they were curious". [SP\_S\_QUEST]

Table 2 shows the number of informants and data sources employed in the Spanish pilot.

Data gathering techniques/documents	Informants			
	Students	Researchers	Teachers	Total
Observations	-	3	-	3
Interviews	-	-	5	5
Questionnaires	68	-	8	76
Generated artefacts	-	-	3	3
Students' diary	22		-	22

Table 2 Number of informants and data gathering techniques in the Spanish pilot

#### 2.3.4 Italian Pilot

The Italian pilot will target OSS course students, namely Health and Social Operators with a subsidiary role in nursing care (EQF4).





The CARESS pilot has integrated and improved the current version of the Health and Social Care Services course by providing students with the professional skills and competences necessary to work in elderly home care.

The main target of the pilot were upper-secondary vocational students aged 17-19 attending a 3-year pathway integrated into the Health and Social Care Services course. Before their enrolment in the CARESS pilot, these students have acquired some previous knowledge in health care. They have also had two traineeship periods.

Participation in the pilot has involved 13 students aged 17-19.

"The students chose for the pilot belong to the best performing class of the Social and Health Care Services Course (...) Students were chosen by their teachers involved in the CARESS project and by the headmaster on the basis of their school attitudes and capacities" [IT\_T\_ART]

The students have previous experience in care, during its OSS training or during eventual working periods. According to their motivation to get involved in this experience, ten students did it because they thought it could be useful for their career. Just a minority of students (3) answered it was mandatory for them. (IT\_S\_QUEST].

Table 3 shows the number of informants and data sources employed in the Italian pilot.

Data gathering techniques/documents	Informants			
	Students	Researchers	Teachers	Total
Observations	-	2	-	2
Interviews	-	-	4	4
Questionnaires	57	-	9	66
Generated artefacts	-	-	3	3
Students' diary	12	-	-	12

 Table 3. Number of informants and data gathering techniques in the Italian pilot

Table 4 shows the participants involved in the pilots' evaluation within the three countries.

Table 4. Informants involved in the pilots

	Students	Researchers	Teachers
Finland	36	2	2
Spain	26	2	11
Italy	13	2	3

### **3 FINDINGS AND EVIDENCE**

This section describes the main findings obtained during the CARESS pilots' evaluation, organized following the anticipatory data reduction diagram (see Figure 2). Throughout the text, the data sources that support the different assertions are indicated with labels (see Table 4 and Figure 4) between square brackets.



Regarding the data sources of the evaluation process, we have observations, interviews, questionnaires, and student's diaries extracted from the CARESS VCP. Moreover, we have obtained information from teachers' generated artefacts (e.g., learning designs, courses syllabus) and log events gathered from the e-learning platform and the VCP. Table 4 shows a brief description of the nature of the different type of data obtained.

Table 4. Data sources and labels used to quote them along the text

Techniques/Documents	Type of data	Label
Observations	Audio/video recordings and observation notes were taken during the pilots' enactment with the experts, to register their actions, impressions, and other emergent issues.	[OB]
Interviews	Audio transcriptions of key questions of a particular issue that helped us to explore the views, experiences, beliefs and/or motivations of teachers and students who participated in the CARES pilots on specific matters (e.g., the pilot's strengths, the difficulties, their perceptions about the competences and skills acquired, etc.)	[INT]
Teachers' generated artifacts	Collection of a diverse set of artefacts generated by the trainers (e.g., learning designs). Used to register if pilot courses were compliant according to ECVET indicators.	[ART]
Log files	Users tracking functionalities within the VCOP and the e-learning platform.	[LOG]
Questionnaires	Feedback questionnaires composed of open-ended and closed items regarding the use of learning materials in the pilots; the satisfaction of teacher and student's performance through the course; the perception of teacher's competency and skills, and student's perception about the usability and the effectiveness of CARESS virtual community of practice. Used to collect the opinions of the experts and the students about the efficacy and the quality of pilots carried out.	[QUEST]
Diary	Personal description of the user experience as a member of the CARESS Virtual Community of practice. This tool will provide gathering data in order to contribute to the identification of competence recognition in non-formal learning context within the CARESS pilots.	[D]

Apart from this type of data, it is worth noticing that we have obtained data from students, teachers and researchers involved in CARESS pilots in Finland, Spain and Italy. Figure 4 illustrates in square brackets the label we will use to identify data sources and informants distributed across countries. For instance, the evidence "this course has been very useful to reinforce my previous knowledge in the field of healthcare in the elderly" [FIN\_S\_QUEST] represents a response of a Finland student obtained from a questionnaire.

It is important to emphasize that, in accordance with the responsive evaluation approach followed we do not aim at obtaining statistically significant results or generalizations but to explore in depth, and understand the experts' perspective and impressions regarding the quality and efficacy of CARESS pilots carried out in Finland, Italy and Spain.



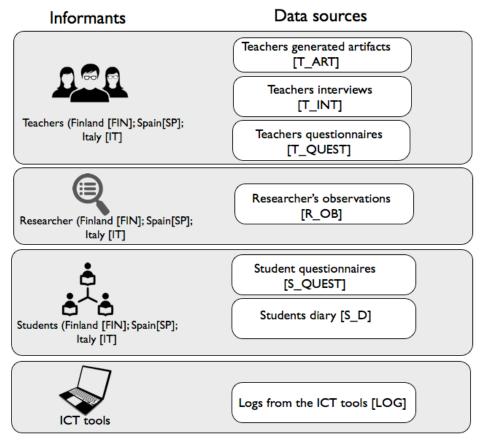


Figure 4. Informants and data sources. Pilots' evaluation

### **3.1** Topic 1: Instructional design of the VET courses

#### 3.1.1 Results: Italy, Spain and Finland

Pilots have followed a similar design process. The EU Caress framework has been used to identify skill gaps (<u>http://glueps-dev.gsic.uva.es/caress3-dev</u>). The aforementioned skill gaps have been identified in each country using: primary data coming from statistics, available documents, results of previous European projects as well as from well-known case studies in the existing literature; secondary data obtained from 42 structured interviews with older adults (>75) carried out in Italy/ Spain/Finland, as well as from 433 questionnaires involving HHCPs and representatives from professional associations in the field of home care.

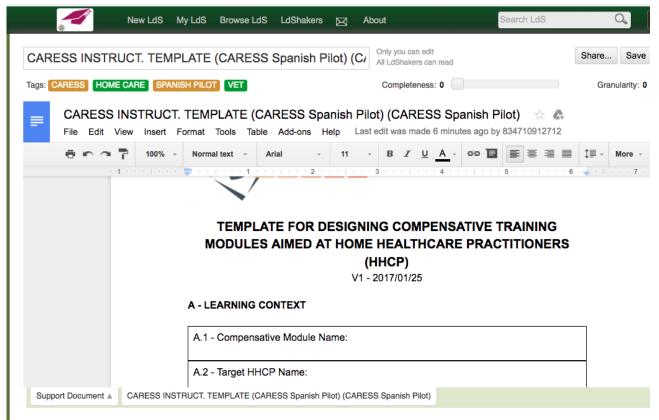
CARESS pilot designers followed a two-layered instructional design process characterized by a macrodesign phase and a micro design phase (Alvino & Trentin, 2012).

- The macro design phase included: the definition of the context, the target and the main constraints related to them; aims and general objectives; macro-categories of contents (normally the titles of the modules) and learning strategies.
- The micro-design included: the detail of learning outcomes, a selection of strategies that should be performed to target the specific outcome; the description of the activities and materials as well as some guidelines to think about how to how to organize groups.

The screenshot (see Figure 5) showcases the edition of a CARESS instructional design template aimed at helping designers (teachers or instructional designers) go from a skill gap (identified by means of the Framework System) to the design of the module (learning goals, pedagogical approach, a sequence of



activities, etc.)



**Figure 5** Designing a compensative learning module using the ILDE

These phases ended up in a set of shared ILDE instructional design documents. Once the design documents were complete, the formal, online part of the compensative learning modules was delivered using the e-Learning platform. On the other hand, the non-formal and informal learning part of the compensative learning modules guided the nurturing process of the VCP platform (e.g., creating specific discussion groups, uploading audio-visual resources around a particular home care topic, etc.).

This process is reported in D.3.4.

During the design process, pilot designers were focused in following all the formal requirements to cope with the learning design path proposed by CARESS coordinator. On the other hand, contextual needs coming from each country were taken into consideration. For instance, pilots' designers from Finland took into account practical nurse vocational qualification, which is regulated by the Finnish National Agency for Education. The Finnish Union of practical nurses "Super" was also involved in the discussions regarding the pilot design. In Italy, Liguria Region Health Association was actively involved in the discussions with teachers from VE-II and provided useful insights about the definition of the homecare-related compensative learning modules. In Spain, Castilla y León Geriatrics and Gerontology Society and representative members from the City Council of Valladolid, among other experts coming from the Faculty of Nursing of the University of Valladolid, were involved in the design and the enactment of course contents to cope with the skill gaps.

It is worth noticing that all pilots included:

**Presence learning activities** were developed using different teaching methods looking for providing meaningful experiences to the targeted students: master classes taught by experts, practical activities:

#### Milestone 6.3



individual and group activities (e.g., group discussion, solving practical cases, peer review activities, experience histories of HCCP's, problem-based learning activities, etc.). Additionally, practical activities included students' field visits to a home-care in ICT research centre, as well as attending conferences and meetings with experts in home care (see D.4.4 Pilot implementation in Italy). In Finland, students also had the opportunity to get involved in a virtual reality demonstration aimed to help practitioners to simulate interventions as caregivers in older adults' home.

The presence learning activities in the three countries also included classroom teaching and students' autonomous work.

The duration of presence learning activities varied among countries: from 100 hours devoted to Italy and Spain, to 16 h devoted in the case of Finland (see course schedule in D.4.4; D.4.5 and D4.6). It is important to highlight that Finland education is based on the idea of promoting flexible pathways. Thus, the Decree 811/1998 recognizes the students' right to make individual choices in his/her studies. Likewise, each student involved in the pilots had an individual study plan, specially designed in collaboration with teachers/tutors. Due to this particularity, teachers involved in the pilot devoted many hours (that were not part of the formal face-to-face sessions) supporting and providing students with guidance. On the other hand, flexible pathways are not common in VET and Higher Education system in Italy and Spain.

**b)** Traineeship and work-based learning opportunities were developed across countries aimed at fostering students' skills in problem-based learning. The number of hours devoted varies among countries from 100h or more hours in the case of Italy and Finland to more than 200h in the case of Spanish pilot.

**c) E-learning activities** across countries involved the use of a myriad of e-learning materials based on the definition of three compensative e-learning modules.

- Welfare technology and ICTs for remote health monitoring and rehabilitation
- Team working, multi-sectorial and multi-professional approach to older adults' needs
- Holistic and rehabilitation approach: fragility, multi-morbidity, multi-professional approach to older adults needs.

Each module was linked to different e-learning materials (e.g., critical incidents, role playing, case studies, interactive presentations, videos, Moodle tests) hosted in the Caress e-learning platform. E-learning materials were available for students during the pilots' enactment. Pilot teachers decided which kind of e-learning materials they wanted to introduce in the e-learning sessions carried out with the students (see, D.4.3). For instance, Spanish students devoted time to work in module 2 and 3 through the role-play activity: *Who is going to dare put the bell on the Cat?* Students had also the opportunity of solving two case studies and one critical incident. In Finland, students completed 2 case studies. On the other hand, Italian students did 6 role-playing, 1 case study and solved 1 critical incident. Teachers devoted at least 30h in the pilots' schedule to work on the e-learning component of the pilots.

**d)** Semi-informal learning through the VCP: All the students involved in the pilots within countries had the opportunity to exchange their ideas and concerns and participate in national and transnational-thematic group discussions according to the transversal competences previously defined by pilot coordinators and Si4life. Students were asked to provide meaningful contributions to the VCP throughout the duration of the pilots. The time devoted by pilot designers to this component of the course was different among countries and it was around 3 months in the case of Finland and 4 months in the case of Spain and Italy. Furthermore, students enrolled in the pilots were asked to complete the students'



experience diary. The student diary was a document used by pilots' teachers to promote the reflection and the discussion of the students in relation to their progress. Teachers fostered students to contribute to the thematic groups and national groups through the VCP as a formal request established in the students learning pact (see, D.4.5 and 4.6). Thus, students were asked to contribute feeding the VCP at least two times during the course (in the case of Finland pilot) or every 15 days in the case of Spain. Anyway, the contributions provided by the students to the VCP were taken into consideration for assessment purposes in the three pilots.

Teachers involved in the design and the enactment of CARESS pilots within the three countries have a wide professional experience as trainers in the field of social and health-care, as it is showed in the following excerpts:

- "I am working in the field of healthcare as a doctor for 35 years. During these years, I have also the opportunity to teach in the Faculty of Nursing in the University of Valladolid. Moreover, during these years I attended more than 400 training activities, like seminars, workshops, congress, etc. I think that I am able to share all my experience in healthcare in this pilot. Moreover, the learning contents are not new for me" [SP\_T\_INT]
- "I have been working in this field since 1988, so I am very familiar". [FIN \_T\_INT]
- "I have been working in medical hospitalization units where nursing care plays an essential role. I also involved in training courses about how to work with a nursing methodology. Currently, I have teaching courses related to this issue both in the hospital where I work and in the Faculty of Nursing. I belong to a specific team-work to elaborate care plans" [SP\_T\_INT]

On the other hand, **pilots' teachers have also previous experience with active methodologies and active learning strategies.** Moreover, some of them were familiar with assessing learning outcomes and professional skills in a workplace environment:

- "I understand also the employer point of view. I have recruited tens of employees, so I can assess what kind of skills are needed in this field, specially practical nurses skills" [FIN\_T\_INT].
- "I am well aware that an aligned curriculum would be necessary, in order to have clear learning outcomes, learning experiences designed to help student achieve those outcomes, and assessment tasks designed to allow students to demonstrate the achievement of those outcomes" [IT\_T\_INT]
- "During my professional experience, I have to try to carry out active learning experiences with my students, based on constructivism approaches" [SP\_T\_INT]

It is worth noticing that for some teachers design the CARESS pilot has been seen as an opportunity to rethink on the relationships among learning objectives, competences and learning outcomes, as it is illustrated in these excerpts:

- "(...) for some specific topics and learning strategies I need the support of specialists that can give a more precise and targeted contribution (...). I'm not completely familiar with this kind of evaluation (...). It is something we should work upon a lot. This will probably be an important step forward in my evaluating approach" [IT\_T\_INT]
- "I feel sure that teaching on this course will increase my professional skills, since I will have to enact teaching methods and tools I do not usually use. This is a big challenge but it is really stimulating" [IT\_T\_INT]
- "I will have to rethink some teaching approaches I have always enacted, and I will need to become more flexible and consistent with the instructional design". [IT\_T\_INT]



During the **design process** teachers had to face **difficulties** but they maintained a positive attitude that allows them learned from the mistakes:

• "It will not be so easy, but we will try our best and the difficulties we will meet and the mistakes we will make will be useful to improve the design and create a very powerful tool that does not exhausts its potentials with the end of the CARESS project" [IT\_INT\_T]

Among the reasons given by teachers concerning their **motivations to get involved** in these courses we have found: **opportunities for exchange information and collaborate with other professionals; introduce learning contents that are relevant in the field of homecare in older adults**, as well as **reinforce students skills in care planning and care methodologies**.

- "My leitmotiv is to collaborate with others, and train professionals in an essential area as homecare in older adults are. Moreover, we can contribute to reinforcing the knowledge of nurses in caregiving from a holistic point of view (social and familiar environment)". [SP\_T\_INT]
- "Teachers should be able to communicate in a proper way aspects related to the care of older adults. Actually, there are many concepts and knowledge that is undervalued in the curricula of healthcare professionals" [SP\_T\_INT]
- "I wish my students were able to elaborate individual care plans and acquire knowledge about nursing methodology in their daily practice according to the needs of the elderly" [SP\_T\_INT]

Table 5 illustrates the teachers' initial questionnaire responses obtained in Italy, Spain and Finland. This questionnaire was aimed at gathering information about the learning design process carried out by the teachers.

The average punctuations in two out of three countries were over 3 (Spain: 3,9 and Finland: 3,2). Teachers' from Italy showed the highest average punctuations according to each statement (4,5).

On the one hand, teachers saw pilots as an opportunity for professionals to be updated in elderly homecare. Moreover, the different pilot dimensions were also interesting to promote students' active learning, as it is shown in the following excerpts:

- "I am satisfied with the design of the course. I think that comprise many of the most important aspects allowing healthcare professionals get updated in elderly home care [SP\_T\_INT]
- Yes, I think that combine face-to-face sessions with e-learning and work-based learning is a good way of teaching and learn contents in a more dynamic way to foster the student's engaged [SP\_T\_INT]

**Teachers from Finland** had a **good agreement score** regarding **the course methodology**, with an average of **4,3**.

The lowest agreement went to the items regarding the **quality level of Pilot's ID documents**, with an **average of 2,4.** The fact that **teachers did not** *find the macro and micro approach to the design* provided by the ID documents **useful** produced a low score **(2,0)**.

Similarly, teachers from Spain gave the lowest punctuation to one item regarding the instructional strategies, highlighting that the ILDE templates did not help them better design the teaching lessons according to the learning outcomes (1,5). The quality Pilot's ID documents had a low acceptance also for these teachers in all its items with an average of 2,9.

However, teachers from Italy had a good agreement score regarding the Quality level of Pilot's ID documents, with an average of 4,6. They particularly agreed to the fact that the ID documents helped them reflect on methodology, skills and transversal competences (5,0).

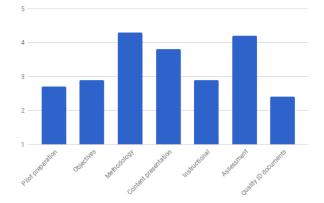


The **lowest agreement**, went to **Assessment and Objectives (4,2)**, highlighting that the objectives could be improved when written in measurable outcomes (students know what they are expected to be able to do) **4,0** 

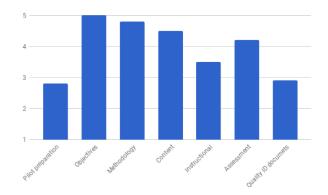
Table 5 Teachers' initial questionnaire (FIN, SP, IT)

- T1 Pilot preparation
- T2: Objectives
- T3: Methodology
- T4: Content presentation
- T5: Instructional design
- T6: Assessment
- T7: Quality ID documents

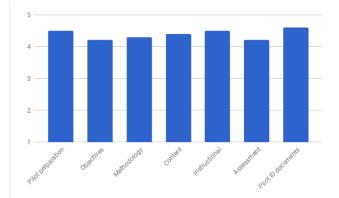
Teachers initial Q (FIN)



Teachers initial QUEST (SP)



Teachers initial QUEST (IT)





Nevertheless, teachers from Italy seemed to be satisfied with the learning design process carried. Thus, there were no items with a score below 4,0.

Among the aspects that could be improved with respect to the design of the course, teachers' responses can be grouped into the following topics:

#### 1. Good design implies time and effort

Teachers' thoughts about the learning design process carried out during the CARESS project, pointed out that there is a need of devoting **more time** to carefully design the courses as well as to provide more support to students individually:

- "The pilot will be improved just having more time to design the course" [FIN\_T\_QUEST]
- "Of course the planning on how to implement the Pilot, with more time" [IT\_T\_QUEST]
- "Timetable" [FIN\_T\_INT]
- "Lack of time to promote more practical experiences" [SP\_T\_INT]
- "Lack of time to contact and provide guidance to students in an individual way" [SP T INT]

#### 2. Learning design vs flexibility

Some teachers thought that ID documents should be improved to guarantee some sort of flexibility that allow them designing "under our own premises" [FIN\_T\_QUEST]. Additionally, the ID documents should provide a "more clear structure" [FIN\_T\_QUEST].

# 3. Improve the transnational collaboration among pilot designers and be focused in assessing learning goals

On the other hand, teachers pointed out that foster the collaboration among pilot designers in the three countries, as well as devoting more time in thinking about how to assess students learning competences, were the main things in which pilots could be improved:

- "Pilots will be improved by increasing the integration of transversal and specific nursing competences and the interaction between the 3 pilots within countries" [SP\_T\_QUEST]
- "There should be more opportunities of exchange of experiences among students" [IT\_T\_INT]
- "The pilot could be improved by giving an in-depth assessment of homecare activities" [IT\_T\_QUEST]

Teachers also expected that some of the **strengths** of getting involved in these pilots were **acquired solid knowledge**, **access to useful information**, **improve team collaboration skills**, **increase students' opportunities to find/or improve their current or future job**, **learn how to use ICT in the healthcare domain**, among others.

- "I really want my students to acquire solid learning outcomes in homecare so as to increase their working opportunities" [IT\_T\_INT]
- "Opportunity to compare teaching approaches with European partners and the acquisition of specific skills and competences as far as team working and the use of technologies in homecare are concerns" [IT\_T\_INT]
- "One of the main positivities of this course will be that students will be able to access to useful information related with their current profession and they will improve their collaborative skills working with their peers' through the virtual community of practice. I guess that students will have the opportunity to learn from other professional's point of view" [SP\_T\_INT]

However, some teachers recognized that some skill gaps could not be attended in only one course:



- "I think that we can't expect relevant changes in the current practice of these professionals. Promote attitudinal changes takes more time and effort." [SP\_T\_INT]
- "I am partially satisfied (with the learning design). There are conceptual contents that are related to attitudinal changes that are part of the transversal modules, but I think that it is important to work on these contents in face-to-face sessions and not only online." [SP\_T\_INT]

Table 6 showed the results of the initial questionnaire carried out with the students enrolled in the pilots' in the three countries.

The average punctuations in two out of 3 countries are over 4,0 (Spain: 4,4 and Italy: 4,6). On the other hand, Finland has an average of 3,6, which also means a remarkable satisfaction.

The students enrolled in the pilots in the three countries showed a high agreement with the statement Q3: *"I find the course program interesting to improve my actual knowledge, skills and competences*" (3,8; 4,7 and 4,7 in Finland, Italy and Spain respectively).

Students from Finland found the "*learning strategies of the course motivating and attractive*" (see Q6: 3,8). Students from Spain and Italy also value with a high punctuation that get enrolled in the pilot was an opportunity to acquired "*Knowledge, skills and competences in home* care *that can be useful to improve my future job options*" (see Q2: 4,8 in Italy and 4,7 in Spain respectively).

Although students demonstrated a good agreement with all the statements in the initial questionnaire, in the case of Finland the lower punctuation was assigned to the statement "*I am aware of the learning objectives of this course*" (see Q1: 3,3). In the case of Spain went to "*I found the learning strategies motivating and interesting*" (see Q6: 4,1). Italian students are younger in comparison with the rest of students that were involved in the rest of the pilots. Thus, some of them pointed out "*difficulties in expressing doubts and concerns about the skills needed in home care2* (Q6: 4,1).

According to the students' learning expectations at the beginning of the pilots their responses can be grouped into the following topics:

- 1. Students wanted to acquire useful knowledge to improve their abilities as carers in the workplace:
- "Of course I want to have all of the information which I can benefit in working life. It's useful" [FIN\_S\_QUEST]
- "I wait to learn something new which will be helpful in working life" [FIN\_S\_QUEST]
- "This project is a novelty for me. I hope to be able to better understand the role of OSS in home care and to acquire new skills [IT\_S\_QUEST]
- "I wish to be able to recognize dangers in clients home" [FIN\_S\_QUEST]
- "Improve my level of assistance at patient's home. Learn new strategies to provide nursing care" [SP\_S\_QUEST]
- "I wish to learn something new"[FIN\_S\_QUEST]
- I hope to learn to detect problems in the home care of dependent patients, as well as to improve my training in primary care [SP\_S\_QUEST]
- 2. Students wanted to get involved in collaborative learning experiences and learn from the experiences of other professionals in the field of home care:



- "Teamwork from other points of view and other professionals in different fields" [SP\_S\_QUEST]
- "I hope to learn more about homecare and I want to work in team with other students and professionals that speak other languages [IT\_S\_QUEST]
- "...learn about experiences of other countries in the care of the elderly at home" [SP\_S\_QUEST]
- "I would like to work abroad and so this could prove very useful" [IT\_S\_QUEST]

#### Table 6 Results students' initial questionnaire. Finland (FN)<sup>1</sup>, Italy (IT) and Spain (SP)

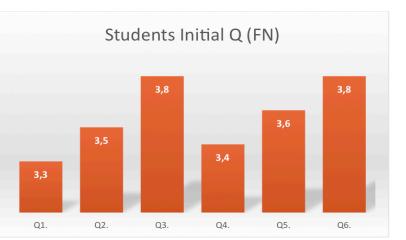
Q1: I am aware of the learning goals of this course.

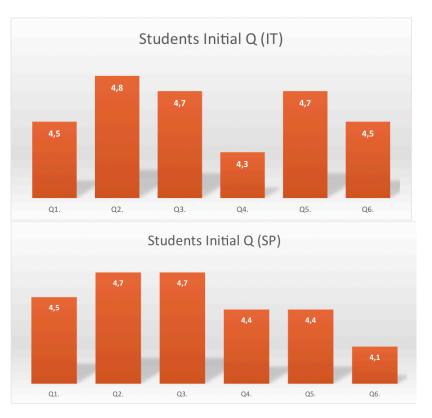
Q2: There are knowledge, skills and competences in home care that can be useful to improve my future job options.

**Q3:** I find the course program interesting to improve my actual knowledge, skills and competences. Q4: I am able to express doubts and concerns about the skills needed in home care.

Q5: I am able to work in team with other students to reach the learning objectives through the proposed activities.

Q6: I find the learning strategies motivating and attractive.





3. Deeper learning in the field homecare is essential for healthcare professionals and students want to acquire advanced techniques in this field.

<sup>&</sup>lt;sup>1</sup> Please note that the data from Finland are the punctuations average obtained from Pilots 2 and 3

Milestone 6.3



- "I hope to receive a more exhaustive training on the care of the patient at home, since I consider it an essential care area" [SP\_S\_QUEST]
- "I think I can learn more about specific techniques in homecare, as well as in the field of new technologies applied to homecare" [IT\_S\_QUEST]
- "I would also like to know more about new technologies applied to homecare" [IT\_S\_QUEST]

There is also a **concern about being able to achieve the competence points promise**: "I want to pass the course quickly" [FIN\_S\_QUEST] or "I'll accomplish all the competence required in the course." [FIN\_S\_QUEST] and **lack of reflection**, when some students said "I don't know" [FIN\_S\_QUEST]. In a lower rate, some comments appeared that reflect the **open** nature of students' **attitude**, "I don't have expectations" [FIN\_S\_QUEST]. I'm willing to receive all the provided information" [IT\_S\_QUEST] "Everything can be useful" [SP\_S\_QUEST].

### **3.2** Topic 2: Participation and students' performance

#### 3.2.1 Italy

Italian students' perception of **course contents, activities and methodologies employed were positive**. During an observation taken place at the beginning of the pilot enactment, students seemed to respond actively and with interest to the activities proposed, as highlighted in the observation:

• "Then were shown a video footage from the Pixar animation film "Up" that immediately captured students' attention and threw them into an empathic state of mind" [IT\_R\_OB]

Additionally, the course activities seemed to **allow interactive participation** among students, and this is clearly perceived by the students:

- "I can share my opinion" [IT\_ S\_ QUEST]
- "I like to collaborate with my class mate" [IT\_S\_QUEST]
- "I enjoyed talking with other people from different countries" [IT\_S\_QUEST]

Although some materials could raise some doubts amongst students, those doubts were giving way to an open and participative attitude:

 "They were initially skeptical about drawing because they thought it was childish, but then they enjoyed it and had creative ideas. In the end, they became aware of the pedagogical use of that activity since it allowed them to compare their cases and the homecare approaches they had adopted" [IT\_R\_OB]

Caress Pilot offered a good opportunity to students to seek the best of the training through the methodology used:

• "Students were motivated to consider self-criticism as a way to improve their skills. The opportunity to see and interact with professionals and older people in different settings during the traineeship was another positive effect on the students." [IT\_R\_OB]

Nevertheless, it was difficult to maintain students' interest all the time. As expected, students alternated periods of attention with others of boredom:

 "They were mostly concentrated and involved, with the exception of limited periods of inattention and bore maybe due to tiredness". [IT\_R\_OB]

As reported in the final questionnaires (see Table 7), Italian students gave the highest score to the **learning impact** (average **4,0**) as they perceived that the application of this **learning will improve their job** 

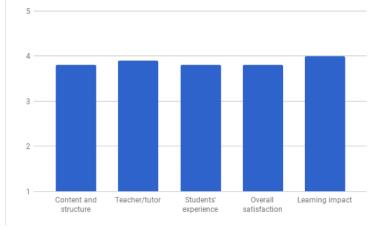


future or current opportunities (4,2), while they reported that the overall organization of the course and the learning methodology used could be improved (3,5), especially within the use of the platform, which lowed their overall satisfaction (3,8). Those numbers are supported by some students' testimonies:

- "The only thing I did not like was that sometimes there was disorganization" [IT\_ S\_ QUEST]
- "The use of technology could be improved" [IT\_S\_QUEST]
- "I did not like the use of the platform because it was not very informative and have a few people to talk" [IT\_S\_QUEST]

 Table 7 Students' final questionnaire (IT)

- Q1. Content and structure
- Q2. Teacher/tutor
- Q3. Students experience
- Q4. Overall satisfaction
- Q5. Learning impact



As the students reported, the course was perceived as **useful to cover needs perceived in their training/job**:

- "I learned what the skills of the home care assistant are in the various European countries." [IT\_S\_QUEST]
- "I was able to go deep in the communication as an argument." [IT\_S\_QUEST]

Finally, all students seemed to had meet their objectives and expectations:

• "Yes, my goals have been achieved, these objectives were to acquire the skills to obtain a validate qualification in all the European countries." [IT\_S\_QUEST].

In some cases, the pilot had even **overcome some students' expectations**:

- "I have never wanted to do this course and I have never had to accept to access the course but in the end, it was very informative" [IT\_S\_QUEST]
- "It was an educational experience" [IT\_S\_QUEST]

During the observation, the researcher observed the **positive motivation and implication of students in the pilot**, as reported:

 "The students – all female – are enthusiastic and developed a positive competitiveness with regard to their colleagues not involved in the project, although they sometimes lack in perceiving the precise width of the project in its entirety, possibly due to their young age. Notwithstanding they understand that their sacrifice (in terms of free time lost) will do them good in the long run." [IT\_R\_OB]



• "They understand that they (the students) are far more skilled than their colleagues not involved in the project." [IT\_R\_OB]

However, as the pilot run, the observer reported that students seemed **not see clearly the impact of this learning program in their future job opportunities**. Despite the fact that "All demonstrated interest and appreciation for the project", they were "not sure that this experience will make any difference when it comes to their future working career with respect to other OSS students" [IT\_R\_OB]

When interviewing the teachers, those confirmed **their own expectations regarding the learning impact** over the students and how this training might impact the students' job opportunities:

- "They all agree on the positive effect on the global training offered to students and in the opportunity they will have to perform a better quality assistance once they enter the care system." [IT\_R\_OB]
- "Pilot students have experimented new teaching materials and methods and have also enhanced their curriculum with home care modules, which greatly contributed to their professional training." [IT\_T\_IN]

Also, the teachers reported a lack of students' motivation at the end of the pilot because the difficulties and the Pilot's demands: overload of work compared with other OSS courses, understand the new learning methodologies, etc.; nevertheless, they were participative an involved in the Pilots' activities:

- "Students were not always motivated because they had difficulties in understanding the whole process (also depending on teachers' incapacity to explain it better) and accepting the increased amount of work they had to do in comparison with their OSS mates not involved in the project. However, they were really involved in the internship practical activities." [IT\_T\_IN]
- "Yes, they were motivated, above all with regard to the internship practical activities" [IT\_T\_IN]
- "Students were really motivated because they understood the real opportunity offered by Caress project and despite some complaints about the huge work they have done; they are well aware of the increased competences they have acquired in comparison with other OSS students." [IT\_T\_IN]

#### 3.2.2 Spain

As well as the Italian students, Spanish students' perception of course contents, activities and methodologies employed were also positive. During the observation taken place at the beginning of the pilot enactment, **students participated actively and with interest in the activities proposed**, as highlighted in the following observation:

• "They show interest and attention. They participate actively in the realization of the exercises that are proposed and interact with each other constructively" [SP\_R\_OB]

During observation, teachers emphasized the positive engagement of students in the face-to-face training:

• "The students seem very interested in the subject, with many questions, participation and interest" [SP\_T\_OB]

Additionally, students "follow the master class by consulting the material previously made available on the virtual platform, completing it with the teacher's explanations" [SP\_ R\_ OB] which evidenced **the mixture of different learning methods to reach the learning objectives**.

Regarding this mixture of learning methodologies, students valued positively the combination of face-toface lessons and distance learning:

Milestone 6.3



• "(I like) The possibility of combining e-learning and face-to-face training" [SP\_S\_QUEST]

To provide and **have access to the material were well valued too**, as those students answered when asked about what they liked the more of the Pilot:

- "Have the didactic material prior to the classes". [SP\_S\_QUEST]
- "(The fact) that the documentation was available on the platform, in an attractive manner." [SP\_S\_QUEST]

When students were asked about their objectives being met, at the end of the Pilot enactment, close to the half of the students' answered positively and some of them partially. Some of them expressed their need of more practical knowledge and skills, and to have the opportunity to meet other professionals' points of view:

- "My goal was to improve my care to patients at home; I expected something more focused on the care practice and not so much care plans" [SP\_S\_QUEST]
- "The issues of coordination between services have been treated superficially" [SP\_ S\_ QUEST]

This idea was early collected during the pilot's observation. As seen in the report:

- "Materials seems to be quite "basic" for their training, very focused on basic principles and foundations of nursing versus other opinions that say that the materials are very well elaborated, the contents and the structure is very coherent. Nevertheless, the materials, including those for e-learning, are well organized." [SP\_R\_OB]
- "We expected something more practical, more focused on the care practice. It's all very theoretical" [SP\_ S\_ OB]

As reported, students **expected and missed more useful information for their daily practice.** For instance, they would have been able to see and study more social work typical content, since it is one of the training gaps that these professionals have, according to their opinions, although social work is not a nursing function:

 "With the exception of yesterday, when a social worker gave a talk, that it helped us a lot, the rest for me were nursing foundations, very theoretical, not much oriented to practice and also does not bring you anything new, basically. I feel a little that we are wasting our time coming here." [SP\_S\_OB]

Students highly valued **other professionals' testimonies**, based in their practice, assessing in a very positive way, for instance, a talk taught by the City Council representative:

• "We need someone to tell us their experiences, like the teacher we had yesterday. She works in the city town hall, she told us her experiences, her cases, and how they solve them" [SP\_ R\_ OB]

Regarding the students' satisfaction with the course, one of the most valued aspects were **the ability of teachers/tutors (average 4,1)** (see table 8):

• "All the teachers involved in the course were excellent" [SP\_S\_QUEST]

Also, within the student experience, Spanish students were especially pleased with **being able to** collaborate with their classmates during the training (4,1) and had the opportunity to ask questions and share their concerns about home health care (3,9)

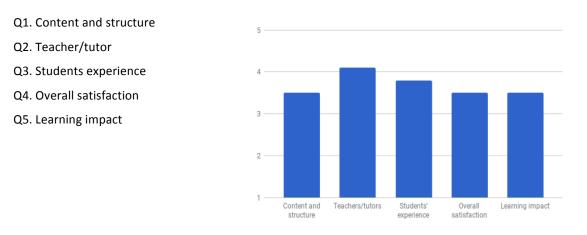
• "(I like the most) the possibility of discussing our concerns and doubts during the face-toface sessions" [SP\_ S\_ QUEST]

Additionally, regarding the Pilot content and structure, for some of them, sometimes **there was not enough time to complete the course activities (3,3)** 



 "(I did not like) the short time of development of the course, in relation to the very broad content of subjects" [SP\_ S\_ QUEST]

 Table 8 Students' final questionnaire (SP)



Finally, different views from different teachers provided a multidisciplinary approach and a wide range of professional experiences, which had a good value for students. Thus, the opportunity to share experiences with other professionals was highlighted as a goal met:

"Improve (my) knowledge, share professional experiences." [SP\_ S\_ QUEST]

Teachers also collected the students' needs for improvement, especially from those who demand **more transdisciplinary knowledge for application to their current job** or more **time to fix the new learning**:

- "(Pilot may be improved by) The inclusion of more socio-sanitary practical cases." [SP\_T\_ INT]
- "(Students) have expressed the need for more training time to settle the contents of the course in a more thoughtful and informed way" [SP\_T\_INT]

#### 3.2.3 Finland

Finnish students **actively participated in face-to-face sessions, expressing their doubts**. As reported during the observation:

 "They listen and follow Power Point slides very carefully. Students have got earlier from somewhere wrong information about the course studying points and some of the students are very disappointed because of it." [FN\_ R\_ OB]

Even though, student's **feedback was taken into account** to assess the learning objectives:

• "After listening and seeing Power Point slides students started to make questions about the course. So they obviously learnt something. A small group of students that stayed after a lesson make even more questions about the course" [FN\_ R\_ OB]

During the observation, the **interactive and participative methodology** was observed by the reporter:

• "The whole teaching was presented in the form of open classroom discussions, with questions challenging learners and a quite interactive atmosphere" [FN\_ R\_ OB]

Also, an external observer pointed out the fact that **student's expressed positive ideas as well as some room for improvement**. Although students seemed to appreciate the usefulness of the course and seemed to enjoy the learning strategies, they missed **more time to go deeper into some crucial elements** of the training.

Milestone 6.3

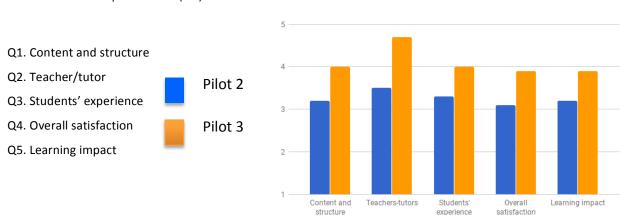


- "All students were grossly aware of the learning goals of this course, and the judged the contents to be quite useful for their future work." [FN\_ R\_ OB]
- "They thought that they were able to reach learning outcomes in teamwork during the course. They found the learning strategies motivating and attractive." [FN\_ R\_ OB]
- "Students found the course to be very fast and would have liked to have longer courses on particular elements of the curriculum, an indication that it was maybe too intense" [FN\_R\_OB]

Some of the highest agreement in the final students' questionnaire went to value **the ability of teachers/tutors when providing students with guidance throughout the program** (See Table 9) (Average 4,1), devoting enough time to answer students' questions and problems and providing an adequate knowledge on the subject.

However, students did not clearly perceive the learning impact in terms of improving the job opportunities. Especially, students were neutral considering the fact that the application of this **learning** will improve their job future or current opportunities (3,1)

It is worth noticing that students' perception over the pilot improved from the pilot 2 to the pilot 3, as showed the table 9.



**Table 9** Students' final questionnaire (FIN)

Additionally, despite the course was not all in Finnish, **students valued positively to have a multicultural environment** and to be able to communicate with other students.

 "It wasn't completely in Finnish, but it was good that multicultural things were taking into account" [FN\_S\_QUEST]

All students affirmed to have reached their goals effectively in the final questionnaire:

- "To get competence points, yes" [FN\_ S\_ QUEST]
- "I learned new things, so yes" [FN\_ S\_ QUEST]

### **3.3** Topic **3**: Teacher's competences and skills

#### 3.3.1 Italy

The main motivation of Italian teachers seemed to be **the challenges and the modernization in their teaching methodologies**. Previous courses at VE-II were excessively traditional, lacking the new IT tools to



meet the requirements of a new generation of students' that uses new technologies and are interconnected through them. The Caress Pilot enabled the use of the e-learning platform with case studies, critical incidents etc. to be performed asynchronously and collaboratively, which it has led teachers and students experiment new learning methods to achieve the learning objectives.

- "I feel sure that teaching on this course will increase my professional skills, since I will have to enact teaching methods and tools I do not usually use. This is a big challenge but it is really stimulating." [IT\_T\_IN]
- "The Pilot will surely help me improve some teaching strategies." [IT\_T\_QUEST]
- "The e-learning activities proved to be a really significant improvement for the OSS course and they will contribute to "modernize" the teaching approach." [IT\_T\_QUEST]
- "The project boosted the OSS course and gave both the teachers and the students involved new impulse to their work." [IT\_R\_OB]

Some of the methodologies used in the pilot, especially those regarding the e-learning and VCP, where new for teachers. Therefore, one of the biggest difficulties was *"a lack of school staff adequately supporting teachers in the general management of the project"* [IT\_ T\_ ART]:

 "At some point, during the definition of the training modules, the teachers involved didn't feel at ease with some parts of the project. Obviously, it's not their fault. Rather they felt that some intermediate role (someone to help them understand what exactly was at stake) was missing." [IT\_ R\_ OB]

However, **motivation was high** despite the efforts done on managing the Pilots' demands:

 "All (Teachers) are positive and well-motivated although report a great effort in addition to an already hard task such as that of training teenage students in a setting that's not always easy to manage. All the same, they're positive and aware that's well worth doing." [IT\_ R\_ OB]

The **timing for the activities** was one of the big difficulties to raise the learning objectives, according to teachers:

- "(I did not like the) bad timing of the activities: classroom activities and e-learning activities should have been simultaneously developed for the students to reinforce the underlying concepts" [IT\_ T\_ QUEST]
- "There wasn't enough time to complete the course activities because when the e-learning materials became available OSS students were unable to start the activities immediately since they were attending their traineeship and so e-learning was frantic due to the limited amount of time at disposal." [IT\_T\_QUEST]

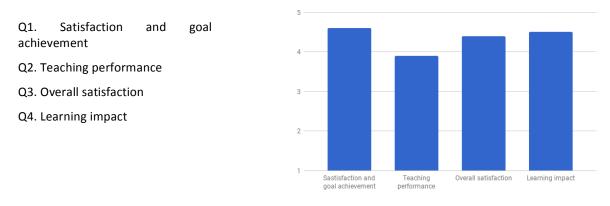
**The overall satisfaction with the pilot was high**, (see table 10) with an average of 4,5. Especially, all Italian teachers agreed on the idea that the contents learned through the course should **improve the student's current or future job opportunities** (5,0)

Additionally, Italian teachers thought that other teachers could be benefited from the learning materials and the course design (5,0)

Italian teachers showed a high self-criticism, as the lowest agreement went to the **teaching performance** (3,9) and those teachers especially disagreeing with the idea of "having enough time for developing all the learning contents of the course", with a score of 2,7.



Table 10 Teachers' final questionnaire (IT)



During the Pilot observation, the researcher highlighted some aspects regarding the teachers working as a team:

- "I sensed a good synergy and cooperative environment" [IT\_ R\_ OB]
- "(Teachers) are well aware of one another responsibilities, difficulties and efforts to bring the project to success" [IT\_ R\_ OB]
- "Teachers are well matched. They form a good team thrilled to bring new ideas and incitement to what they hope will become standard training. All that despite a certain lack of support/interest from the rest of the teaching body" [IT\_ R\_ OB]

Finally, teachers **agreed in the effectiveness of the Pilot**, regarding the teaching and assessment of the skill gaps:

- "The training pilot course has proved significant in filling some home care-related gaps in OSS students' learning outcomes. Students have developed greater awareness about home care realities and requirements." [IT\_T\_IN]
- "It completed the knowledge and skills of the traditional OSS course and allowed students to get to know different local home care realities" [IT\_T\_IN]

Another interesting outcome in this regard is the response of Italian teachers when asked about **how the pilot could be improved**:

- 1. Improving the **communication** between project coordinator, teachers and students, and providing more teachers' support:
  - "Communication in general might have been improved. The project is really complex and the VEII staff is numerically inadequate to manage all the activities and responsibilities. However European project are not always collectively supported in schools and therefore more resources should be implemented" [IT\_ T\_ IN]
  - "Students should be better informed about the project with all its details, in order to be more aware of what they are doing" [IT\_ T\_ IN]
- 2. Improving the activities to involve teachers and project coordinators:
  - "The arrangement of the meetings and various activities and the opportunity of being in touch with e-health activities" [IT\_T\_IN]
  - "The presence meetings and the opportunity of becoming acquainted with the new home care frontiers" [IT\_ T\_ IN]
- 3. Improving the learning materials and providing more time to develop the activities:
  - "Clearer medium and long term objective, more integration between materials and different timing." [IT\_ T\_ IN]
  - "Materials of the case studies might be better reflected upon" [IT\_T\_IN]



#### 3.3.2 Spain

An especial effort was made to integrate all the close project's partners and some external teachers into the training, from the point of view of the Spanish' pilot. Additionally, all the training has been agreed with all the local CARESS members involved in the planning and management of the pilot course.

 "It is worth noting the effort has been well distributed among all CARESS partners involved in the planning and management of the pilot course. Thus, in terms of one of the coordinators "the training has been integrated with a marked interdisciplinary character (sharing the knowledge of the different professionals, as regulators, social workers and nurses)." [SP\_ R\_ OB]

Spanish teachers were highly motivated. Their reasons laid mainly in **improving the care of the older people**, as a current issue, as well as **improve the nursing profession by developing better standards**:

- "My main motivation is to collaborate in the training on a priority area of current and future action regarding the care projection of nursing professionals." [SP\_T\_IN]
- "Transmit to students some important aspects of the care of the elderly, often little valued and sometimes hidden (...), which is why they are often not taken into account."
   [SP\_T\_IN]
- "To help students to be able to elaborate individualized care plans and integrate the nursing methodology in their daily work, in a way that helps them to reflect their care..." [SP\_T\_IN]

Their previous knowledge was wide in the care of the older people and all are **experienced and trained in new learning methodologies**:

- "(...) I believe I have enough competence and experience to participate in the training activity designed by CARESS, (...) to be useful to facilitate the achievement of the objectives and the integration of the competences to the students that perform this training course. (...) I have participated in a constant recycling and updating (...), so I think I know the different resources and tools for a complete evaluation regarding the learning outcomes of the students." [SP\_T\_IN]
- "Given that I am a Specialist in Geriatrics, I apply the integral geriatric assessment as a basic tool of my professional performance (...) It can be said that, in geriatric care, no aspect of the elderly person is alien to our professional interest and our performance, whose basic objective is to achieve the greatest possible well-being of the elderly. (...) The elaboration of the programs of the subjects in the Spanish Universities are carried out from the definition of the competences that should be reached by the students" [SP\_T\_IN]
- "(...) I have also participated in the training of nursing methodology both in the hospital and in the Faculty and formed part of work groups in the development of care plans. (I used to) working in team with small groups, in which individualized teaching can be promoted and helps to evaluate learning outcomes. (...) works and the participation of the student in the classroom are also fundamental to measure the learning results." [SP\_ T\_ IN]

Again, the **timing** seemed to be a difficulty to be solved:

 "Little time to carry out all the necessary practical approach. Small availability of teacherstudent contact" [SP\_T\_IN]

"The time that the student must devote to develop a care plan

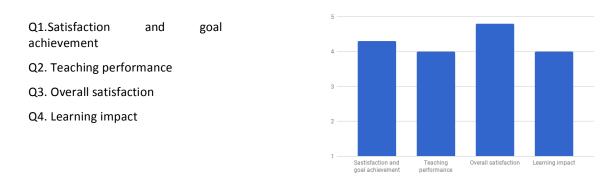
 "The time that the student must devote to develop a care plan until the terminology is mastered." [SP\_T\_IN]



• "The course (take place) on weekends, with intensive schedules. They would prefer to do it a slow pace and not in so intensive period." [SP\_T\_IN]

Regarding the final thoughts, the **overall satisfaction** is the most agreed by teachers with an average of **4,8**, (see table 11) **while the lowest agreement went to the learning impact (4,0)**, especially disagreeing with the idea of the "contents learning through the course would improve their students current or future job opportunities", with an average of **2,5**.

 Table 11. Teachers' final questionnaire (SP)



During the Pilot observation, the researcher highlighted some aspects regarding the **teachers' satisfaction** with the learning methodology used:

- "The subject taught, as well as the times used, have not been adjusted to all the work developed to complete the training units. Until the same day that we started with the Pilot face-to-face classes, it was not clear how they should be focused" [SP\_T\_OB]
- "(...) the positive engagement of students in the face-to-face training: "The students are very interested in the subject, with many questions, participation and interest" [SP\_ R\_ OB]
- "Another teacher declared to be "discretely satisfied", as the "contents have a good level and in many cases excellent, but the contents that were deleted from the face-to-face part has allowed barely to enunciate the most relevant issues" (Note: those contents had its continuation in virtual sessions) [SP\_ R\_ OB]

The observers could collect **some ideas for improvement**, regarding the face-to-face learning sessions, **highlighting the complexity of changing attitudes**:

 "The improvement of home care goes through the acquisition of certain knowledge and skills but the competence in the key issues in relation to improvement, goes through the adjustment/modification of attitudes (nothing simple to be undertaken)" In that sense, "it would be very important to implement a face-to-face format that adequately addresses this need." [SP\_ R\_ OB]

Some other improvement points, according to the group of teacher's reflections, were those regarding the language, the time and the excessive workload for students who were already working:

- "The language barrier. Overlapping of activities and lack of time. Lack of flexibility in deliveries." [SP\_T\_ART]
- Excessive workload for students who have professional's engagements. Difficulties of working in group" [SP\_T\_ART]

Finally, as previously reported, one of the most valued aspects by the students were the ability of teachers/tutors:

Milestone 6.3



 "I liked the teachers participating in the Pilot. They are all high-quality professionals" [SP\_ S\_QUEST]

### 3.3.3 Finland

**Finnish teachers involved in the design and the enactment of CARESS pilots** had **a wide professional experience as trainers** in the field of social and health-care, as it is shown in the following excerpts:

- "I have been working in this field since 1988, so I am very familiar". [FIN\_T\_INT]
- "Teachers had about 20 years of teaching experience and intervened in all three modules produced by the project. The thought that their competences allowed them to teach the proposed modules well, especially as technology in care is not a novelty in Finland. Teachers were very familiar with the concept of teaching in view of learning outcomes as this is the dominant model in Finland." [FIN \_R\_OB]

On the other hand, **Finish' teachers have also previous experience with active methodologies and active learning strategies.** Moreover, some of them were familiar with assessing learning outcomes and professional skills in a workplace environment:

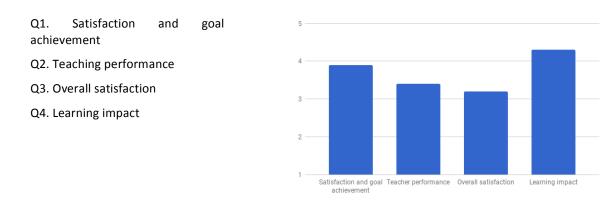
"I understand also the employer point of view. I have recruited tens of employees, so I can assess what kind of skills are needed in this field, especially practical nurses' skills" [FIN\_T\_INT].

Teachers also detected some barriers, or difficulties to raise some learning objectives:

• Teachers found that the most difficult points were to teach a positive attitude towards technology with the learners, as well. [FIN \_R\_OB]

As reported in the final questionnaire, the **learning impact** is the most agreed by teachers with an average of **4,3** (see table 12). The lowest score went to the **overall satisfaction (3,2)** and especially with the overall organization of the CARESS Pilot, with a scoring average of **1,7**.

 Table 12 Students' final questionnaire



When asked about what they like more, teachers were **satisfied with the final design** and **students' approach** to the pilot course:

- "Our Finnish Pilot targeting Practical Nurses was clear and well designed...." [FIN \_T\_QUEST]
- "National pilot course in Moodle was easily approached by students and learning assignments clearly instructed" [FIN \_T\_QUEST]

#### Milestone 6.3



Also, the learning **methodology** is well valued, as it encouraged independent study and participation:

• "My students are adults, and they are able to study alone. E-learning was very good for them. They can also discuss it, it was very good," [FIN \_T\_QUEST]

Teachers believe the pilot **helped to fill some need for training in the field of homecare education**, highlighting the use of new technologies and the multicultural interaction:

 "The VR-home visit and the Moodle tasks related to it (helped to fill educational needs). (Also) Service system, multicultural interaction, ICT aid and elderly abuse offered a theoretical base for training." [FIN\_T\_INT]

To evaluate learning outcomes from the teachers was sometimes a challenge:

- "Students learning outcomes was evaluated in skills demonstration and I wasn't the teacher who was there to evaluate. According to my face-to-face sessions, I could say students gave positive feedback about the case and other discussions, for example, "I have never before thought about that". I could say I think my pilot classes developed students ethical-professional attitude for difficult situations at workplace." [FIN\_T\_INT]
- "There were other teachers outside of the pilot who assessed students' skills demonstration, so pilot teachers cannot be sure about its learning results", although, "students achieved at least acceptable learning outcomes in classroom learning tasks". [FIN \_T\_ART]

Finally, some **barriers and difficulties** felt by the teachers may serve from a **star point to improve** the pilot:

- "Instructions and guidance were delivered too late for us and the differences between theoretical reference frameworks was a weakness." [FIN\_T\_INT]
- "Checking and assessing learning tasks was laborious" [FIN \_T\_ART]
- "Lack of student's self-management skills and language skills" [FIN \_T\_ART]
- "What are the aims (of the Pilot) and timetable (...) I guess it's also important to know expected outcomes too." [FIN\_T\_INT]
- "I need more time to plan and implement my course. I do not like the instructions that were given to us, the instructor did not know what the education of practical nurses is. The expectations of this course or pilot were unclear." [FIN\_T\_QUEST]

### **3.4** Topic 4: Quality and usefulness of training materials

#### 3.4.1 Italy, Spain and Finland

Figure 6 shows the results obtained from the teachers' questionnaire to evaluate the training materials used in the pilot courses. In this case, teachers also took into account both the e-learning materials mostly employed in the CARESS integrated platform and those materials used in the face-to-face classrooms.



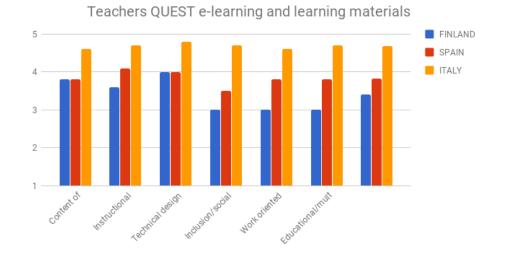


Figure 6. Results Finland, Spain and Italy. Teachers' questionnaire evaluating the learning materials

Learning materials received remarkable punctuations by all the teachers involved in the CARESS pilots within countries (4,7; 3,8 and 3,4 as an average from Italy, Spain and Finland respectively)

In Finland, teachers highly valued the Technical design (average 4,0.). The lowest score went to the inclusion/social considerations and work-oriented design (average 3,0)

• e.g. Learning materials established difficulty grades according to student's diversity: 2,0

Also, the educational/multimedia and management aspects related to e-learning materials were not so well punctuated, with an average of 3,0.

• e.g., The graphics and sound were well used: 2,0

Teachers from Spain highly valued the **Instructional design**: **4,1**, especially highlighting that the learning materials included specific activities to foster group interaction **(4,5)** 

The lowest score went to the **inclusion/social considerations (3,5)** especially when talking about the learning materials taking into account students' previous knowledge **(3,0)** 

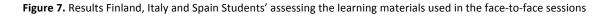
Also, **the educational/multimedia and management aspects related to e-learning materials** had a **remarkable** punctuation of **3,8.** (e.g., *Navigation was clear and consistent*: **3,5**)

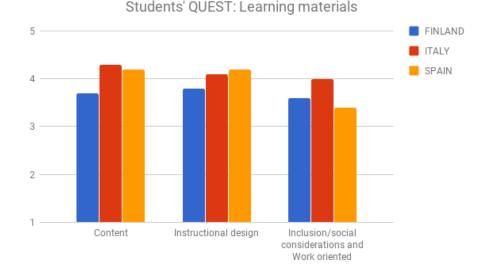
Teachers from Italy highly valued the **Technical design**: **4,8**. They especially highlighted that the learning materials were presented in different formats (e.g., videos, documents, web pages, software, open educational resources, ICT tools) **(5,0)** 

The lowest score went to the **content of learning materials (4,6)** especially when talking about whether the level of difficulty was appropriate for the intended audience **(4,3)** 

Figure 7 illustrates the results obtained from the students' questionnaire to assess the learning materials employed in the face-to-face sessions within the pilots and Figure 8 the results obtained from the students' questionnaire to assess the e-learning materials.







**Learning materials used in the face-to-face sessions obtained positive punctuations** by the students within the three pilots with an average of 3,7; 4,0 and 4,2 for Finland, Spain and Italy respectively [FIN, SP, IT\_S\_QUEST].

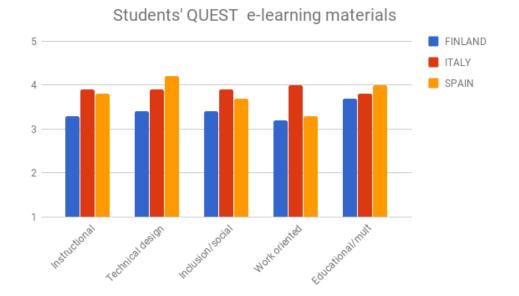
The most remarkable punctuations for the learning materials went to the following statements:

- "Learning materials had an accurate content" (3,8; 4,7 and 4,4 for Finland, Spain and Italy respectively.
- "Learning materials included specific activities to foster group interaction" (3,8; 4,2 and 4,1 for Finland, Spain and Italy respectively)
- "Learning materials allowed/encouraged you to work independently" (3,8; 4,7 and 4,3 for Finland, Spain and Italy respectively.

Among the **less valued items** students pointed out those items related with "learning materials provided opportunities to develop entrepreneurial mindsets" (3,4; 3,4 and 3,8 for Finland, Spain and Italy respectively) and "The learning materials integrate opportunities of knowing labour market needs and skills" (3,4 and 3,2 for Finland and Spain respectively). On the contrary, Italian students' gave its low punctuation to the item "Instructional goals and learner objectives were clearly stated through Learning materials" (3,7).

On the other hand, students' provided feedback assessing the e-learning materials used mostly in the elearning sessions carried out in the CARESS integrate platform. As we can see if we compare Figure 7 and Figure 8, punctuations given to e-learning materials were slightly lower in comparison with those obtained as an average from the learning materials (3,4; 3,9 and 3,8 from Finland, Italy and Spain respectively).





#### Figure 8 Results Finland, Italy and Spain. Students' questionnaire evaluating the e-learning materials

Teachers' from the three countries gave remarkable punctuations to the item related to the "educational and multimedia aspects of these materials" (e.g., *the design was user-friendly, the graphics were not updated and little help was required to work independently*) with an average of 3,6; 4,1 and 3,9 from Finland, Spain and Italy respectively. Teachers from Finland valued very positively that "contents were consistently introduced in the e-learning materials" (4,0). Teachers from Spain gave the higher punctuation to the statement related to "the contents of the e-learning materials were presented in different formats (e.g., video, web pages, images, etc.) (4,0). On the other hand, teachers from Italy valued positively that the "e-learning materials allowed students to work independently" (4,2).

Table 13 shows the results from the teachers' final questionnaire regarding the learning impact of the learning materials used in the pilots. The punctuations gave by the teachers as an average were high (4,0 Finland; 4,2 Spain and 4,8 Italy). Teachers agreed that learning materials developed in the CARESS project would be useful for future courses. Furthermore, teachers from Italy strongly agree that these materials will be useful to improve the student's current or future work opportunities (5,0). It is worth noticing that teachers from Spain did not perceive the usefulness of these materials to improve the current opportunities of the students (2,0) probably due to the years of working experience of the target engaged in the Spanish pilot. Also, teachers showed to be satisfied with the training materials and learning resources (3,0; 5,0; 4,3 from Finland, Spain and Italy respectively).

According to the previous ideas, the training materials used in the CARESS project (the national ones and the e-learning materials) have been seen by teachers as an opportunity to reflect on the students' learning gaps and start designing from the scratch. Furthermore, learning materials bring new opportunities to those students that can use them to study on their own, as shown in the following excerpt:

- "(....) The Pilot has required the development, redevelopment and collection of a considerable quantity of material. The greatest part of the materials has been created from the scratch, which has proved quite challenging and has involved intense research and teamwork (...) "[IT\_ART\_T]
- (...) The CARESS project has enabled the acquisition and use of a learning platform with case studies, critical incidents, and other e-learning materials to be performed asynchronously and collaboratively that have helped students acquire new learning methods (...) [IT\_ART\_T]





- "There are lots of usable new material we didn't have before the project. It also opens the possibility to study faster at your own pace to the students who has learning readiness's for that" [FIN\_QUEST\_T]
- "National materials in Moodle platform were a positive experience and there was nice" [FIN\_QUEST\_T]

**Table 13.** Teachers' questionnaire: Satisfaction and impact of the learning materials. Results from Finland, Spain and Italy

materials

Teachers' QUEST. Satisfaction and impact of learning

Q1: I will use this teaching material in the future

Q2: It will be useful to use those learning material for future courses

Q3: The contents learned through the course will improve my student's current or future job opportunities

Q4: If will be good if other colleagues could have access to this course design

Q5: I am satisfied with the training resources and materials used

Nevertheless, teachers pointed out some weakness according to the difficulty to adapt the elearning materials to the different targets involved in the CARESS project (e.g., different background, level of studies, years of working experience, age, etc.):

• "Some of the concepts were also in too high level for our students. Gap between theory and practice was too big in some transversal materials. Our students would have needed more material that is practical "[FIN\_QUEST\_T]

Besides, some e-learning materials should be refined in order to guarantee their accuracy:

- "(...) Materials of the case studies might be better reflected upon" [IT\_INT\_T]
- "More accuracy would have been required with regard to the materials uploaded on the platform" [IT\_INT\_T]

# 3.5 T5: Non formal and informal learning through CARESS e-learning platform and VCP

The CARESS integrated platform has been seen as a useful resource to promote the information exchange and the collaboration between students within the three pilots, as it is illustrated in the following teachers' reflections:

- "Participation in VCP has allowed the interaction between participants, share ideas, projects and meaningful contributions for each student" [SP\_ART\_T]
- "The Virtual Community of Practice has proved to be the real new informal learning tool experimented by pilot students, who until that very moment had used social networks for entertainment, never for professional reasons" [IT\_ART\_T]





• "Students find VCP interesting and they liked to study on the Internet" [FIN\_ART\_T]

Students within the three countries were engaged in the discussions about different target issues selected from transversal modules. Moreover, students contributed with its post to the thematic/transnational group discussions and wrote their reflections about their learning experiences within the platform (see Figure 9). In order to do this, they filled in the students' experience diary. The assessment of the activities carried out by the teachers is explained in depth in D. 4.4, 4.5 and 4.6.

Figure 9. Screenshot CARESS integrated platform. Thematic/ Transnational group discussion. Finland, Italy and Spain

-)→ 健 ✿	https://communitycaress.gsic.uva.es/index.php/es/grupos/115- 🛛 😶 😒 🗘 🔍 Buscar	III\ 🗉 📀 🔺 🍷 🔤 🗏
Encuestas Tareas	O fadumo ha comentado esta publicación acerca de hace 1 mes	Grupos profesionales más recientes
FILTROS PERSONALIZADOS No hay filtros personalizados	hotmail.com • Holistic approach to prevention and rehabilitation	
disponibles + Añadir filtro	In a study say that is important the 3 dimensions of older adults Health . I Think the same.? Me gusta - Comentar · Republicar · Compartir en Redes Sociales <b>13</b> 0	Caress pilota italiano - OSS
MIEMBROS (50)	<ul> <li>A Nerea le gusta esto.</li> <li>Yes, of course I think so. Even not only for older adults. It's very important for all the people. here 1 mes - Me gusta (0)</li> </ul>	19 miembros Unirse al grupo
Ver todo	of course!!!	ARESS
ÁLBUMES DE FOTOS (0) No se han creado álbumes por el momento	I think so, e hace 1 mes - Me gusta (0)	Spanish CARESS piloto-Enfermero 31 miembros Unirse al orupo
VIDEOS RECIENTES (0) No se han creado videos	yes, of course. all of them are very important! hace 1 mes - Me gusta (0)	Unitse al grupu
	L support it hace 1 mes - Me gusta (0)	Finnish CARESS pilot - Lähihoitaja
	Ok hace 1 mes - Me gusta (0)	41 miembros Unirse al grupo
	c hotmail.com	Ver todos los grupos

Students and teachers within the three pilots highlighted some of the potential benefits of using the CARESS VCP. Thus, to be able to share knowledge and the opportunity to communicate with others had been seeing as the main strengths of the VCP:

- "The VCP is a suitable means to stimulate students and involve them in discussions with professionals or mates on issues related to their profession" [IT\_INT\_T]
- "I can share my knowledge into the platform." [IT\_S\_QUEST]
- "What I like the most was the opportunity of sharing knowledge in the platform with my classmates" [SP\_QUEST\_S]
- "I like the format: The Platform, meetings" [IT\_S\_QUEST]

Although students within the three countries gave to the CARESS integrated platform remarkable punctuation (see the results of TAM questionnaire below in this section), they highlighted some aspects that could be improved:

#### 1. Look and feel and navigation of the CARESS VCP:

- "The internet platform is difficult and confused." [IT\_S\_QUEST]
- "Sometimes access to the platform could be more intuitive." [SP\_S\_QUEST]
- "Quite unclear platform." [FN\_S\_QUEST]
- "(I did not like) Platform navigation. It could be improved that things would be easier to find. Locations were behind many clicks. Make the platform easiest to use." [FN\_S\_QUEST]



#### 2. Invest more effort and training in learning how to use the platform:

- Although this kind of platforms, according to a teacher reflection "are motivating and enriching", a limiting factor might be, according to the same teacher, "the time needed for the initial support that must be high". [SP\_R\_OB]
- "(The biggest weakness of the pilot course enactment): The lack of time devoted to the use of the platform." [IT\_T\_IN]
- "during the face-to-face classes, there were several difficulties expressed by the students to register and move around the e-learning platform" [Teacher 1] [SP\_OBS]
- 3. Promote the transnational discussions through the VCP, a fact that many students found disappointed:
  - "I did not like the use of the platform because it was not very informative and have few people to talk." [IT\_S\_QUEST]
  - "I don't like that I can't share my opinion with people of other country in the platform." [IT\_S\_QUEST]
  - "I don't like that I can't communicate with people of other country." [IT\_S\_QUEST]
  - "It could be improved the communication in the platform." [IT\_S\_QUEST]
- **4.** Likewise, one of the aspects that teachers pointed out as a barrier to promote the discussion among students within countries was the **language issues:** 
  - "A point that could be improved in the VCP is to design activities that allow students to work together cross-border with students from other project countries. However, teachers' pointed out that time was lacking to develop such an activity. Teachers thought that the use of the VCP will probably be more developed during the practical phase of training, as it will provide a single point of contact between students and teachers." [FN\_R\_OB]
  - "Additionally, another teacher pointed one of the main reasons for not using the VCP might be "the laziness of the common language (English) which in his/her case is limiting " [SP\_R\_OB]
  - "I have my limitations speaking in English, but you had to answer in English because the question was in English... Then I see that ... the online part, do not meet expectations ... " [SP\_R\_OB]
  - "To develop activities that allow learners to exchange with learners from other pilot countries, bearing in mind the difficulties linked to the language barriers." [IT\_INT\_T]
  - "The language is a further obstacle so basically there is no connection between the three pilots." [IT\_R\_OB]
- 5. Fostering the social affordances of the VCP to avoid the overlapping with other VLE available within the countries.
  - "The teachers found working with the Virtual Community of Practice challenging not because of the platform itself, but because it exists alongside the already existing Virtual Learning Environment used by the whole OMNIA institution. It could be recommended to see how the CARESS VCP could be integrated into already commonly used VCPs (e.g. Moodle). Students do not earn competence points for using the project VCP (contrary to OMNIA's one), so despite an initial presentation of the platform to students, use is limited. Some discussions did take place on the platform, however." [FN\_R\_OB]
  - "Better integrate the online tools (e-learning and VCP) into existing online learning tools of the partners." [FIN\_R\_OBS

With the purpose of gathering more data that provide us in-depth information about the usefulness and acceptance of the CARESS integrated platform, we decided to use a questionnaire to assess the VCP users' acceptance and usage. Technology Acceptance Model (TAM) was developed in the 1980's (Davis, 1989). Holden & Karsh, 2010 reasoned "the key to increasing use was first to increase acceptance of IT, which could be assessed by individuals about their future intentions to use the IT" (p.160). The TAM was



developed to predict, explain information technology acceptance and its usage. The main topics to look at according to this model are system quality, service quality, perceived usefulness, perceived ease of use and user satisfaction with the system.

We have elaborated on the ideas proposed by TAM model in order to create a questionnaire suitable for assessing the CARESS Virtual Community of Practice according to the students' perspective. Likewise, we took into account the feedback provided by the project coordinators to refine and reformulate the proposed questions. 20 out of 75 students (9 students from Finland, 4 from Spain and 7 from Italy) answered the questionnaire between the 12<sup>th</sup> and the 19<sup>th</sup> of February, 2018.

The questionnaire contains (see annex 3) 5 level Likert-items distributed into 12 questions regarding the following topics.

- Background data
- Previous experience in using VCP
  - Knowledge quality
  - Perceived usefulness
  - Perceived ease of use
  - Satisfaction
  - Knowledge sharing behavior

Students were asked the agreement level with each statement, being 1 = Completely disagree, 2=Partially disagree, 3= Neither agree nor disagree, 4= Partially agree and 5=Completely agree.

Moreover, the questionnaire included 3 open-ended questions with the aim of gathering data according to the students' usage expectations of CARESS VCP as well as to identify some of their potential strengths and weaknesses.

#### 3.5.1 Results: Italy, Spain and Finland

15%

60%

15%

Participants' age

More than 35 years 10%

Less than 18 years

18-25 years

25-35 years

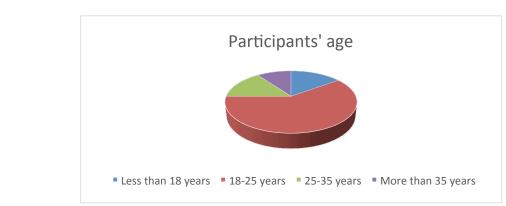
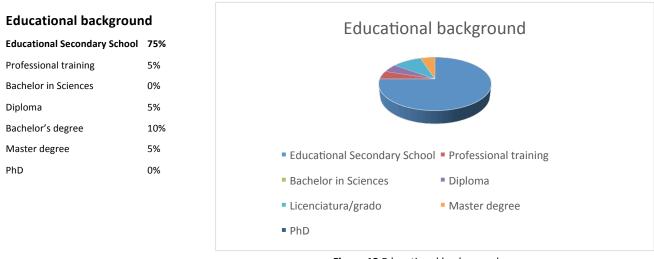
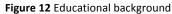


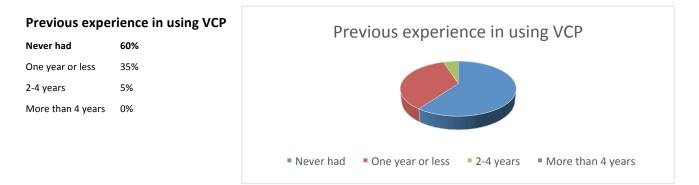
Figure 10. Participants' age

Figure 11 Educational background









#### a) Knowledge Quality

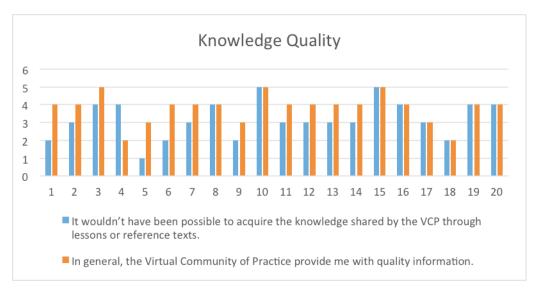
- 1. It wouldn't have been possible to acquire the knowledge shared by the VCP through lessons or reference texts. (Average: 3,2)
- 2. In general, the Virtual Community of Practice provides me with quality information. (Average: 3,8)

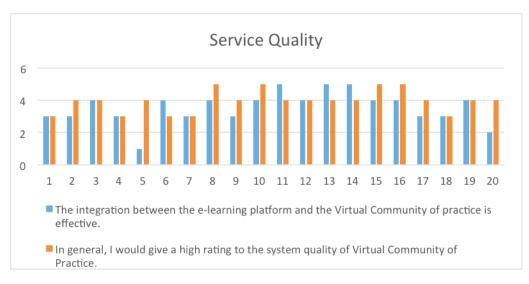
#### b) Service Quality

- 3. The integration between the e-learning platform and the Virtual Community of practice is effective. (Average: 3,6)
- 4. In general, I would give a high rating to the system quality of Virtual Community of Practice. (Average: 4,0)



#### Figure 13. Knowledge quality





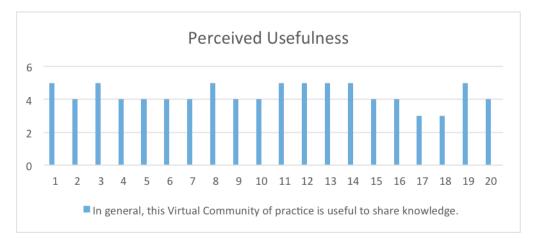
#### Figure 14 Service Quality

### d) Perceived Usefulness

5. In general, this Virtual Community of practice is useful to share knowledge. (Average: 4,3)

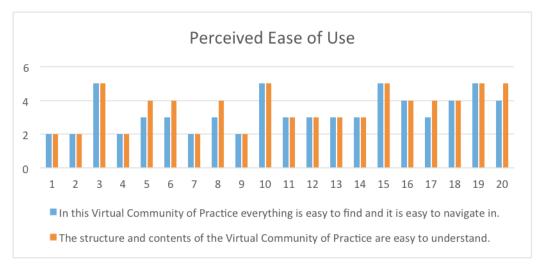


#### Figure 15. Perceived usefulness



#### e) Perceived Ease of Use

- 6. In this Virtual Community of Practice everything is easy to find and it is easy to navigate in. (Average: 3,3)
- The structure and contents of the Virtual Community of Practice are easy to understand. (Average: 3,6)



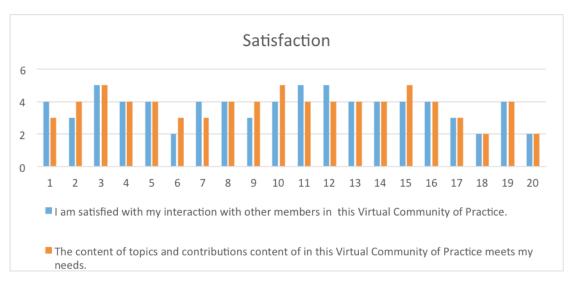
#### Figure 16. Perceived ease of use

#### f) Satisfaction

- 8. I am satisfied with my interaction with other members in this Virtual Community of Practice. (Average: 3,7)
- 9. The content of topics and contributions content of in this Virtual Community of Practice meets my needs. (Average: 3,8)



#### Figure 17. Satisfaction



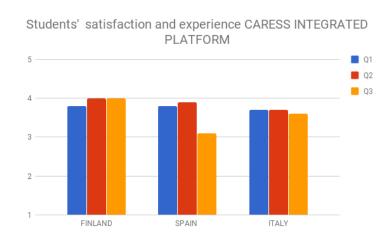
These results are aligned with the data obtained from the students' final questionnaire as we can see in Table 14 students gave remarkable punctuations to those statements related to their satisfaction with the VCP and their overall experience within this platform (average: FIN: 3,9; SP: 3,6 and Italy: 3,6)

Table 14 Students' satisfaction and experience CARESS integrated platform

Q1: I was able to share learned knowledge, ideas and learning materials through the CARESS Virtual Community of Practice

Q2: I was able to make online contact with other students and professionals through the CARESS Virtual Community of Practice

Q3: I was pleased with the use and possibilities of the CARESS Virtual Community of Practice

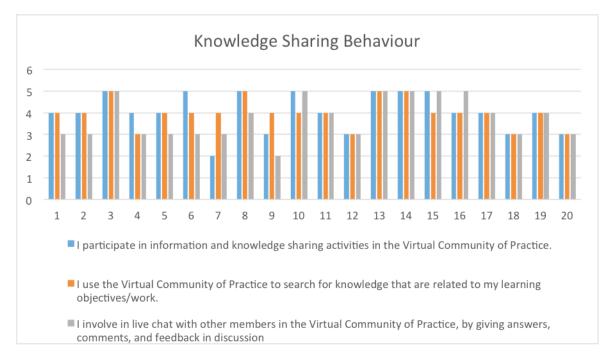


#### g) Knowledge Sharing Behaviour

- 10. I participate in information and knowledge sharing activities in the Virtual Community of Practice. (Average: 4,1)
- 11. I use the Virtual Community of Practice to search for knowledge that are related to my learning objectives/work. (Average: 4,0)
- 12. I involve in live chat with other members in the Virtual Community of Practice, by giving answers, comments, and feedback in discussion. (Average: 3,8)



#### Figure 18. Knowledge and sharing behaviour



#### 13. Have your objectives for the use of the Virtual Community of Practice been met? What were they?

**Sharing knowledge and ideas is one of the main characteristics of a Virtual Community of practice**. In fact, the majority of students pointed at this characteristic as **an objective met**.

- "Yes, my objective was to complete the learning tasks" [IT\_S\_QUEST]
- "Share information, discuss ideas and improve my knowledge" [SP\_S\_QUEST]

Some students referred to have gained skills, knowledge and competence points through the VCP

- "I have gained 5 competence points" [FIN\_S\_QUEST]
- "I have gained 3 competence points" [FIN\_S\_QUEST]
- "Yes, sharing my knowledge" [IT\_S\_QUEST]

#### Learning to use the VCP was one of the objectives met for some students

• "Yes, I have learnt to use the VCP" [FIN\_S\_QUEST]

On the other hand, some students stated **not having objectives in mind** or not being sure about it:

- "not having defined any objectives" [FN\_S\_QUEST]
- "I can't say" [FN\_S\_QUEST]

Or directly confirmed that their objectives were **not fulfilled** [SP\_S\_QUEST], or just **partially** [SP\_S\_QUEST]. A student expressed his/her **disappointment** as he/she "expected better documentation" [SP\_S\_QUEST].

#### 14. What did you like about the format of the Virtual Community of Practice? Name at least one thing.

Students had answered with a variety of aspects to this question, not just about the format (as it was asked) but also **about the uses of the VCP**.



Regarding the format, students **like the structure** [FN\_S\_QUEST], **accessibility** [SP\_S\_QUEST] and **simplicity** [SP\_S\_QUEST]. Even a student pointed at the "similarities with Facebook" as something he/she liked [FN\_S\_QUEST].

Some students found **the format** "interesting" [FN\_S\_QUEST], and "quite nice" [FN\_S\_QUEST] while a student referred that "at first it was difficult to use" [FN\_S\_QUEST].

For the rest of students, **the possibilities of the VCP** are the more remarkable thing to highlight:

- "Share my opinions and knowledge with other users" [FN\_S\_QUEST]
- "Exchanging opinions with other operators" [IT\_S\_QUEST]
- "(Having) reasonable discussions" [FN\_S\_QUEST]
- "Interaction with other fellows, from other countries" [SP\_S\_QUEST]

Regarding **knowledge acquisition**, some students find the VCP useful:

- "(Knowing) roles and skills of home health care practitioners" [FN\_S\_QUEST]
- "(Possible to find) lots of information" [FN\_S\_QUEST]

Finally, other students simply referred to "*like groups*" [IT\_S\_QUEST].

#### 15. What didn't you like or could be improved? Name at least one thing.

Some students agreed on the idea the VCP was **difficult to use** at the beginning:

- "Disorganized" [FN\_S\_QUEST]
- "A bit confusing" [SP\_S\_QUEST]
- "Wasn't quite clear" [FN\_S\_QUEST]
- "Wasn't easy to use" [FN\_S\_QUEST]
- "Difficult to navigate at first" but "in the end easier" [FN\_S\_QUEST]

A student did not like or thought it can be improved:

- "the discovery VCP guidance" [FN\_S\_QUEST]
- "that I can chat only with my school friends" [IT\_S\_QUEST]

Another student stressed negatively the request to use the VCP as **mandatory**, as if that way, the platform **losses their attractiveness for being used**:

 "The obligation to participate in forums, because it makes many comments lose their usefulness." [SP\_S\_QUEST]

Some students directly made **practical suggestions** as "more training" [SP\_S\_QUEST] and to be able to use the VCP with "other devices like smartphones" [SP\_S\_QUEST].

The average in the questionnaire is **3,7 over 5**, which is remarkable.

We can see the lowest punctuation in two questions:

- "It wouldn't have been possible to acquire the knowledge shared by the VCP through lessons or reference texts". (3,2) (related to **Knowledge Quality**)
- "In this Virtual Community of Practice everything is easy to find and it is easy to navigate in". (3,3) (related to **Perceived Ease of Use**)

While the highest punctuation went to:

- "In general, this Virtual Community of practice is **useful to share knowledge**". (4,3) (related to Perceived Usefulness)
- "I participate in information and knowledge sharing activities in the Virtual Community of Practice". (4,1) (related to Knowledge Sharing Behaviour)





The results of the questionnaire contrasted with the open questions highlighted that there is a **low perceived ease of use**, supported by comments such as the VCP was "disorganized", "a bit confusing" "wasn't quite clear" or "wasn't easy to use" but **a high perceived usefulness** by the students, specially talking about sharing knowledge, again supported by comments such as "share my opinions and knowledge with other users" "exchanging opinions with other operators" or having "reasonable discussions" "interaction with other fellows", even from "other countries".

On the other hand, although there is a **low knowledge quality** punctuation, (e.g., referred by a student replied he/she says he/she "expected better documentation the students had a high **Knowledge Sharing Behaviour** punctuation, supported by comments such as the fact that sharing knowledge and ideas was pointed out as an objective met by many students.

# **3.6 Wrapping up the CARESS pilots' evaluation**

Workplace learning home-care is expected to become more complex. Learning how to work in a multicultural context, the lack of time and resources, the collaborative nature of the work with other caregivers and relatives, as well as management and organizational barriers are some of the challenges that HCCPs have to face. The work done in the CARESS pilots is fostering workplace learning by means of a technology enhanced learning approach that provides learning design scaffolds, as well as support for both formal, nonformal and informal compensative learning modules. CARESS pilots have been developed targeting students with different background and professional experiences within European countries. This way, promoting learning experiences in professionals with so many differences of qualifications and expectations can be seen as a huge challenge. In spite of the barriers and limitations, the work done by pilots' coordinators has allowed the design of a set of learning strategies relevant for VET in the field of homecare for older adults.

According to the design process followed by teachers, it is worth noticing that there is a tension between the learning design procedures that are formulated in terms of patterns that can be useful to understand and compare the design of others and the flexibility that is demanded by teachers. Coordinating three pilots with the same structure has not been easy. This is because the courses incorporate three dimensions (nonformal, informal and formal learning) as well as because of the cultural gaps and the differences among the educational policies among countries. Due to this fact, pilots' coordinators have carried out their designs according to the initial planning, and they have fulfilled the indicators of the success of the CARESS project (i.e., compliance with ECVET, learning designs based on the identification of learning gaps, the support of the VCP, etc.). On the other hand, CARESS coordinator has invested a lot of effort in providing partners with useful tools to improve the exchange of information within pilots (e.g., students' learning pact template, templates to generate the instructional design documents, etc.)

However, the lack of time and the great amount of guidelines that teachers have followed at the same time, has provoked an overload to teachers.

The quality of teachers' performance, the CARESS integrated platform and the quality of the e-learning materials created from scratch by teachers have seen as one of the main strengths of the outcomes generated in the pilots.

Students enjoyed getting involved in the CARESS VCOP. Teachers thought that this platform was a rich learning experience for the students. However, both teachers' and students have missed more opportunities to share information and get involved in discussions with professionals from other countries. Teachers highlighted that there is a need to invest more time and effort in learning how to use



this resource. Moreover, there is a need to improve the role of teachers as facilitators to engage students in fruitful discussions.

Finally, the learning materials based on active methodologies employed in the pilots have been seen as one of the main strength of getting involved in this project. Teacher's thought that designing these materials was a chance to reflect on their teaching. They also considered that these materials would be useful for their future practice. The majority of the students, despite their different backgrounds and professional's experiences, agreed that learning materials allowed them to improve their knowledge about home care.

# **4 ANNEXES**

			WP4-WP6			
FINNISH PILOT	STARTING MONTH	CLOSING MONTH	REFERENCE STAFF PERSON	NUMBER OF STUDENTS INVOLVED	ACTUAL STATUS	NOTES
E-LEARNING						
PRESENCE LEARNING						
APPRENTICESHIP/OTHER						
VCP						

### 4.1 Annex 1. PILOT DESCRIPTION TRACKING TOOL

TOTAL N. OF STUDENTS	
WHO ARE THE STUDENTS	
NUMBER OF TEACHERS	
WHO ARE THE TEACHERS	
PRESENCE REGISTERS AVAILABLE YES/NOT EU COMPLIANT YES/NOT	
E-LEARNING ACTIVITIES TRACKING/MONITORING (describe how it will be managed)	
HOW VCP DIARY / TRACKING REPORT WILL BE USED?	
FINAL EXAM (when? how?)	
TYPE OF FINAL CERTIFICATE	

#### STATUS OF THE EVALUATION TASKS IN T.6.3



	(to b	e started, in pro	ogress, translati	ng the response	es, sent)	
INITIAL EVALUATION	Annex 3A Ini teachers' inter	view ques evalua	nnex 9A: tionnaire to ate teachers' ot design	Annex 1: Guidelines perform observatio	to	nnex 6: Students' initial questionnaire
	i.e.: In progress		ranslating the onses/ sent			
MIDTERM EVALUATION		Annex	1: Guidelines	to perform ob	servation	S
FINAL EVALUATION	Annex 4: Questionnaire to evaluate the training materials by students	Annex 5: Questionnaire to evaluate the training materials by teachers	Annex 7: Students' final questionnaire	Annex 8: Teachers' final questionnaire	Annex 10: Students' reflective diary	
SIX MONTHS POST TRAINING	Annex 11: questionnaire	Students'	post-training	Annex 12: Stud	ents' post-	training interview

### 4.2 Annex 2. STUDENT LEARNING PACT TEMPLATE

LEGENDA: red text includes suggestions for drawing down the student training pact for a specific pilot; please replace it with proper contents.

# STUDENT TRAINING PACT

# [INSERT THE LOGO OF YOUR INSITUTION]

# **GENERAL INFORMATION**

COURSE TITLE	
STARTING DATE-CLOSING DATE	
LEVEL OF QUALIFICATION (EQF)	



RESPONSIBLE TEACHERS	
CONTACT INFORMATION ( teachers e-mail)	
PLACE	
DEPARTMENT/INSTITUTIONS INVOLVED	

#### COURSE CONTEXT

[Introduce a general overview of the pilot course, its aims and briefly explain why the course might be important or interesting to the target]

#### PRE-REQUISITE

[Explain who is the target of this course and if there are some previous knowledge or qualification that students should demonstrate before the enrolment]

#### COMPETENCIES

#### OBJECTIVES/COURSE GOALS:

[The course goals describe what each student should know or be able to do by the end of the course. Including these goals in the syllabus can help you articulate the rationale behind assignments, exams, and the organization of the course.]

#### COURSE SCHEDULE

[Include on the course schedule the dates that you will be covering specific topics, the due dates for major assignments; and the date of the final exam (if there will be any). The more detailed the course schedule, the more useful it will be for the students.]

	IMPLEMENTATION/ DURATION	STARTING DATE/ CLOSING DATE
	Please explicit (if possible) how many hours will be devoted to on-classroom activities and how many hours will be for non-presence activities (e.g., students' autonomous work)	
PRESENCE LEARNING ACTIVITIES LESSONS AND STUDY	-nº of on-classroom hours (theoretical/practical, groupal tutorials, evaluation, seminars) nº of hours that students should devote to autonomous work	Date of the first and the last lessons



TRAINEESHIP/ WORK-BASED LEARNING	n <sup>o</sup> of hours that students should devote to traineeship/work-based learning etc.	Timing for traineeship/work-based learning
E-LEARNING	nº of hours that students are supposed to spend in e-learning (individual study + activities)	Period of time during which the e- learning material will be available If slots are envisaged (e.g. Module 1 Nov 2017-march2018) and Module 2 and Module 3 (Dec 2017-March 2018) please make it explicit.
INFORMAL LEARNING (VCP)	Participation in the Virtual Community of Practice cannot be measured in terms of "time", but in terms of "meaningful contributions". Students are supposed to provide meaningful contributions to the VCP throughout the duration of the activity	Pilot specific starting date depends on "Discovery VCP activity date End March 31 <sup>st</sup> 2018

#### TEACHING METHODOLOGY

Explain the teaching methods that are going to be used during the course (e.g., theoretical classrooms, project based learning, collaborative learning, autonomous work etc.)

# LEARNING OUTCOMES AND CONTENTS

[Please explain what kind of knowledge, skills, and transversal competencies students are supposed to get thanks to the training; these competences should be the same which the assessment will focus on; this should be specified for each pilot component (presence –e-learning-VCP)]

#### PRESENCE LEARNING

MODULE NAME/NUMBER	TARGETED COMPETENCES

#### E-LEARNING CARESS TRANSVERSAL MODULES

3 Modules have been set-up on CARESS e-learning Platform. These modules will be at your disposal until March 31<sup>st</sup> to deepen your competences about homecare.

All of them include Interactive Learning Materials which can be studied individually in any time and any place, accessing the platform with your own account. Some of them also include specific learning activities to be carried out in forum discussions.

Check in the assessment section of this agreement which Units and which activities will be taken into account for final assessment.

MODULE NAME/NUMBER	TARGETED LEARNING OUTCOMES



MODULE 1 - Welfare technology and ICTs for remote health monitoring and rehabilitation	<ul> <li>basic knowledge about Welfare Technology</li> <li>basic knowledge about the underling concepts and ethical issues of the use of ICTs for health monitoring;</li> <li>basic knowledge and skills about the main ICT/mobile solutions for home-monitoring and prevention;</li> <li>basic knowledge and skills about the main ICT/mobile solutions for treatment, assistance and rehabilitation</li> </ul>
MODULE 2 - Team working, multi-sectoral and multi- professional approach to older adults' needs	<ul> <li>Basic knowledge and skills about:</li> <li>the communication with the patient;</li> <li>team working and professional group dynamics;</li> <li>a multi-professional approach to older adults' needs assessment;</li> <li>local and territorial networks which older adults can rely on;</li> <li>multicultural issues in homecare.</li> </ul>
MODULE 3 - Holistic and rehabilitation approach: frailty, multi-morbidity, multi- professional approach to older adults needs	<ul> <li>specific skills concerning the proactive approach to ageing, such as skills for frailty detection and treatment, active and healthy ageing and falls prevention;</li> <li>skills for enhancing quality care, such as skills about ethical issues management and older adults abuse detection (Unit 4) or skills about basic counselling techniques;</li> <li>specific geriatric nursing skills, both at general/theoretic level (chronic diseases epidemiology, multimorbidity, impact of lifestyles, older adults empowerment) and at practical level (pressure ulcers management).</li> </ul>

#### OTHER E-LEARNING MODULES

Fill in this section in case of additional e-learning modules following the same approach of the previous section

#### VIRTUAL COMMUNITY OF PRACTICE (VCP)

Participation in VCP will allow for the development of specific skill through an informal learning process.

A small set of pre-defined learning outcomes will be targeted and will be evaluated in the final assessment; they are listed in the table below; anyway, many other secondary and unexpected outcomes could be reached on the base of the discussion and the activities generated on the platform.

ТОРІС	TARGETED LEARNING OUTCOMES
01	To be aware of the types of ICTs which can support the professional in daily practice (tools for sharing documents, electronic clinical record, electronic agenda, monitoring tools, etc.) including their potentialities, their limits, their usability, their cost, etc. in order to be able to select and use the most proper ones



Team working, multi-sectoral and multi-professional approach to older adults' needs		
Holistic and rehabilitation approach: frailty, multi-morbidity, multi-professional approach to older adults needs	To be aware of the crucial role played by an holistic approach to older , adults' needs analysis.	

## ASSESSMENT – GENERAL

Maximum final grade will be XXXXX (eg. 100/100)

The overall assessment of the students will be based on the following assessment steps.

STEP/TOOL	GRADING -
Final oral exam – formal learning	xxx/100
Final written exam – formal learning	xxx/100
Final oral exam – informal learning – discussion on VCP diary and students tracking	xxx/100
Results of traineeship/work-based learning	xxx/100
Collaborative activities on e-learning platform	xxx/100
TOTAL GRADE	XXXXX (eg. 100/100)

Here are provided details about the learning outcomes/modules which each assessment step will focus on and the assessment criteria.

[sections depends on the steps listed above; set up a section for each of the steps]

#### FINAL ORAL EXAM – FORMAL LEARNING

Assessment will locus off	
PRESENCE /E- LEARNING	REFERENCE MODULE /UNIT
PRESENCE	Module XXX
	Module XXX
	Module XXX
E-LEARNING CARESS	Eg. Module 1 –Unit 2
TRANSVERSAL MODULES	Eg.Module 2 – Unit 2
	Eg. Module 2 – Unit 3
	Eg. Module 2 – Unit 4

#### Assessment will focus on



Eg. Module 3 – Unit 1
Eg. Module 3 – Unit 2
Eg. Module 3 – Unit 4
Eg. Module 3 – Unit 5

#### FINAL WITTEN EXAM – FORMAL LEARNING

#### Assessment will focus on

PRESENCE /E- LEARNING	REFERENCE MODULE /UNIT
PRESENCE	Module XXX
	Module XXX
	Module XXX
E-LEARNING CARESS	Eg. Module 1 –Unit 2
TRANSVERSAL MODULES	Eg.Module 2 – Unit 2
	Eg. Module 2 – Unit 3
	Eg. Module 2 – Unit 4
	Eg. Module 3 – Unit 1
	Eg. Module 3 – Unit 2
	Eg. Module 3 – Unit 4
	Eg. Module 3 – Unit 5

#### FINAL ORAL EXAM – INFORMAL LEARNING – DISCUSSION ON VCP DIARY AND STUDENTS TRACKING

Students participation in VCP will be assessed thanks to 2 main tools:

- Tracking Report: it provides a list of the actions/activities carried out by the student in the VCP
- **Experience Diary Report**: it includes all of the "entries" published by the student in the diary.

# Students are supposed to print out both documents and take them to the final oral exam in order to use them as a base for the discussion.

# Students are expected to fill in a "new entry" in the Experience Diary <u>at least</u> every <u>week/15 days?</u> on the base of the provided template.

In the VCP, the development of the specific transversal competences will be targeted, mainly through groups discussion. These competences will be the following:

ТОРІС	TARGETED LEARNING OUTCOMES
0,	To be aware of the types of ICTs which can support the professional in daily practice (tools for sharing documents, electronic clinical record, electronic agenda, monitoring tools, etc.) including their potentialities, their limits, their usability, their cost, etc. in order to be able to select and use the most proper ones



Team working, multi-sectoral and multi-professional approach to older adults' needs		
Holistic and rehabilitation approach: frailty, multi-morbidity, multi-professional approach to older adults needs	n To be aware of the crucial role played by an holistic approach to older, adults' needs analysis.	

These competences will be targeted through National Discussion Groups (specify language)

In addition, specific competences will be targeted through Thematic Groups Discussions, which will be carried out in English and will involve students from different pilots.

Competences targeted through Thematic groups will be the following:

- To be able to manage multicultural issues, taking into account the user's life history and culture
- To be able to set up the proper level of closeness/intimacy with the older adult and his/her family taking into account biological, social and psychological elements.

#### RESULTS OF TRAINEESHIP/WORK-BASED LEARNING

Please detail how students will be assessed

#### COLLABORATIVE ACTIVITIES ON E-LEARNING PLATFORM

Students are supposed to engage in the following collaborative activities on CARESS e-learning platform.

E-LEARNING CARESS TRANSVERSAL MODULES	UNIT / ACTIVITY
MODULE 2 - Team working, multi-sectoral and multi-professional approach to older adults' needs	Eg. Unit 2 - "Role Play" "WHO'S GOING TO DARE PUT THE BELL ON THE CAT?
MODULE 3 - Holistic and	Eg. Unit 4 - "Older adults abuse - Critical incident analysis "
rehabilitation approach: frailty, multi-morbidity,	Eg. Unit 5 - "Mental health in older adults – Case Study"
multi-professional approach to older adults needs	Eg. Unit 6 - "Empowerment - Juan's case – Case Study"

Evaluation criteria will be the following



CRITERIA	% GRADE
Participation in all of the proposed activities YES/NO	20%
At least 2 meaningful contributions to activity of Unit "X"	Depends on the number of activities
At least 2 meaningful contributions to activity of Unit "y"	Depends on the number of activities
At least 2 meaningful contributions to activity of Unit "z"	Depends on the number of activities

"*Meaningful contributions*" means posts/contributions to documents/contributions to discussions which provide an added value to the discussion/work/document. Contributions such as "*I agree/disagree*" with no explanations, for instance, won't be considered as meaningful.

STUDENT NAME: \_\_\_\_\_\_

SIGNED FOR ACKNOWLEDGEMENT: \_\_\_\_\_

# 4.3 Annex 3. TAM QUESTIONNAIRE VCP

**Instructions:** Please complete this evaluation by responding to the topics below. Your feedback will assist us in evaluating the quality of the CARESS VCP. This information will be kept confidential and used only for the purpose of evaluating the CARESS pilot course.

Country Finland Italy Spain	
Age	
Less than 18 years	
18-25 years	
25-35 years	
more than 35 years	
Educational background	
Educational Secondary School	
Diploma	
Please, use the full name or University degree	

**CARESS** Project



Master degree

Experience using VCPs Never had One year or less 2-4 years More than 4 years

### a) Knowledge Quality (KQ)

Q	To what extent do you <b>agree</b> with the following statements? I following scale: 1 = Completely disagree 2=Partially disagree 3=Neither agree nor disagree 4=Partially agree 5=Con	Please use the npletely agree
1.	It wouldn't have been possible to acquire the knowledge shared by the VCP through lessons or reference texts.	12345
2.	In general, the Virtual Community of Practice provide me with quality information.	12345

### b) Service Quality (SeQ)

Q	To what extent do you <b>agree</b> with the following statements? <b>Please use the following scale:</b>		
	1 = Completely disagree 2=Partially disagree 3=Neither agree nor disagree 4=Partially agree 5	5=Completely agree	
3.	The Virtual Community of Practice is visually appealing.	1 2 3 4 5	
4.	Tutors/Group managers, inside the Virtual Community of Practice, show a sincere interest in solving member problems by giving prompt answers.	12345	

### c) System Quality (SyQ)

Q	
	To what extent do you <b>agree</b> with the following statements? <b>Please use the following scale:</b>
	Tonowing scale:



	1 = Completely disagree 2=Partially disagree 3=Neither agree nor disagree 4=Partially agree	5=Completely agree
5.	The integration between the e-learning platform and the Virtual Community of practice is effective.	12345
6.	In general, I would give a high rating to the system quality of Virtual Community of Practice.	12345

#### d) Perceived Usefulness (PU)

Q	To what extent do you <b>agree</b> with the following statements? <b>Please use the following scale:</b>		
	1 = Completely disagree 2=Partially disagree 3=Neither agree nor disagree 4=Partially agree	5=Completely agree	
	In general, this Virtual Community of practice is useful to share knowledge.	12345	

### e) Perceived Ease of Use (PEU)

Q	To what extent do you <b>agree</b> with the following statements? <b>Please use the</b> following scale: 1 = Completely disagree 2=Partially disagree	
		5=Completely agree
	In this Virtual Community of Practice everything is easy to find and it is easy to navigate in.	12345
9.	The structure and contents of the Virtual Community of Practice are easy to understand.	12345

### f) Satisfaction (SAT)

Q	To what extent do you <b>agree</b> with the following statements? <b>Please use the following scale:</b>	
	1 = Completely disagree	2=Partially disagree



	3=Neither agree nor disagree 4=Partially agree	5=Completely agree
10.	I am satisfied with my interaction with other members in this Virtual Community of Practice.	12345
11.	The content of topics and contributions content of in this Virtual Community of Practice meets my needs.	12345

#### g) Knowledge Sharing Behaviour (KSB)

Q	To what extent do you <b>agree</b> with the following statem following scale: 1 = Completely disagree 2=Partially disagree 3=Neither agree nor disagree 4=Partially agree	ents? Please use the 5=Completely agree
12.	I participate in information and knowledge sharing activities in the Virtual Community of Practice.	12345
13.	I use the Virtual Community of Practice to search for knowledge that are related to my learning objectives/work.	12345
14.	I involve in live chat with other members in the Virtual Community of Practice, by giving answers, comments, and feedback in discussion	12345

#### f) Please write in your personal responses

**15.** Have your objectives for the use of the Virtual Community of Practice been met? What were they?



**16.** What did you like about the format of the Virtual Community of Practice? Name at least one thing.

**17.** What didn't you like or could be improved? Name at least one thing.

18. Other comments.

Thank you for your participation