



Lifelong  
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Programme



**ICT Project**

Innovative Caregivers' Training

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**Project**

**ICT – Innovative caregivers' training**

# Transfer plan

Towards an innovative and sustainable way of coping  
with demographic change.

ICT project, transferring and improving the SUFUCA (2010) Model.

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# 1. The concept of transfer in ICT project

The objectives of the project ICT-training are to enable target persons (caregivers who have no specific training in the health care field and their connected professionals, social workers, patients' relatives, etc) to meet the challenges that their work situation asks them in professional, social and personal terms. In particular this project aims at promoting (through the use of ICT equipment and hence the TOI-content of this project) the networking and problem solving skills of the caregivers with other professionals in the area. As a consequence their strategic position with respect to their patients/clients will be enhanced due to increased networking with the local health care system. At the same time also possible inconveniences regarding bad working conditions or social isolation will be reduced.

The Transfer plan "*Towards an innovative and sustainable way of coping with demographic change*" identifies in a comprehensive way:

- the methodology of the transfer process;
- the way in which requirements of professionals acting as caregivers should be defined, in terms of competences, as well as methods and tools to analyse training needs and identify learning scenarios (formal and non formal);
- the training design to be implemented.

This work allows to design training activities for healthcare workers in the home care sector in an optimal way (e.g. by matching key competences required in the VET sector with learning needs of not formally skilled workers) on the track of the three testing sessions to be performed in Switzerland, Italy and Poland.

The Transfer plan aims at implementing the objectives of the project, valuing, adapting and to a certain extent improving contents, methods and tools developed by the SUFUCA (2010) project, in order to set up an innovative training Model (ICT), offering a comprehensive and flexible program of further/continuous education in caregiving sector. This program is thought to be flexible and sustainable, enabling the learners integrate training sessions in presence, workplace experience and blended learning supported by web tools. The transfer plan designs how to plan lessons, e-learning, reflective coaching and workplace learning in a consistent way. With respect to SUFUCA, ICT adds technology-enabled care across settings as a new content, but mainly develops a set of user-friendly tools enabling the learners (caregivers) interact one each other, and with teachers and trainers. The transfer plan is based:

- on a stronger valorization of individual potentials and existing skills of home care assistants (including migrant caregivers, who have often gained substantial knowledge in the past by informal learning approaches or an initial training in their countries of origin)
- on the promotion of complementary training modules for home care assistants (including migrant caregivers): learning units focusing on the use of ICT-tools in order to become familiar with tele-health solutions and above all in order to facilitate the cooperation between home caregivers and other healthcare professionals. New technologies support also mentoring activities addressed to stimulate "hands on" learning processes directly at the workplace setting.
- on the development of learning processes in the field of social security and networking, in order to enable migrant caregivers to acquire competences (active citizenship) and hence an added value regarding social and practical issues (e.g. existing job-search networks, associations or self-help groups).

The Transfer plan is based on some fundamental concepts, orienting the work to be done:

- any model, even successful and largely tested, works in a defined context, which has to be analysed, in order to understand the requirements for a successful implementation in a diverse situation
- any transfer of innovation implies a clever contextualisation of methods and tools in the receiving contexts and socio-cultural environments, which should therefore be analysed and taken in consideration
- the transfer of innovation is strictly linked to the adaptation and further development of methods and tools on which the transfer is based, as far as the transfer is a dynamic process, occurring at a certain distance of time, and therefore counting on new technologies, knowledge, etc., to be incorporated in order to improve the original Model.

Our Transfer plan largely implements this strategy, keeping far away from a mere and mechanical reproduction of the original Model.

It is based on an intense action-research process, whose contents are defined by the next chapters. It implies first of all a good **contextualization and adaptation of the Model** (and of its requirements), the analysis of learning needs and the definition of some key challenges to be coped with, when we deal with the introduction and valuation of ICT tools and facilities in order to improve caregiving and elderly people quality of life (based on the idea of keeping elderly as long as possible in their home/social environment. It implies the definition of **country profiles**, considering demographic change, labor market/gender problems, characteristics, competences and needs of the formal/informal caregivers, institutional patterns according to a systemic approach.

Last but not least, it includes the piloting of the model in 3 partner countries, characterized by totally diverse conditions (Switzerland, Italy and Poland), which could contribute at verifying effectiveness–efficiency, pertinence and sustainability of the Learning Model, according to strategic priorities of the partner countries, emerging needs and depending on the different testing fields.

## 2. From SUFUCA to ICT

ICT project mainly draws on the results of SUFUCA project, promoted and coordinated by the Finnish partner JEDU, but also on a certain number of Models and initiatives developed in recent years, aimed at implementing more effective and sustainable home care services, in order to cope with demographic change and emerging needs of the elderly. SUFUCA offers a concrete and solid set of contents and structure method, because gives the opportunity to users to find service information and behavioral suggestions and practices to face concrete problems. SUFUCA project developed new, creative and innovative methods and activities for supporting the physical, psychosocial and functional capacity of older people. In the background there was the thinking model of the supporting process of functional capacity of older people. This process was made transparent and written open in VATO –training package ([www.kam.fi/vato](http://www.kam.fi/vato)) which was the outcome of LdV pilot project completed previously. To be able to complete the process of supporting the functional capacity the caregivers and students need easily available methods and activities for supporting. SUFUCA-project offers concrete tools for supporting. This aim supports improvement in quality and innovation in social and health education and in the care of older people.

In order to better match sectorial and situated needs, and to implement the training model in an optimal way, the transfer plan takes in addition into account:

- first of all experiences and achievements of the Grand Aides approach (USA), based on the activation of proximity networks in order to enlarge the provision of home health and care services, valuing new technologies and training at the scope people of the neighborhood, available to act as volunteers
- the results of some complementary studies already conducted in the field by SUPSI (e.g. integration of the LENEMI project's results (LLP Partnership 2011-2013) and the research by Solcà 2013: *l'Agency delle migranti est-europee attive nel care work* – Swiss National Science Foundation) and by other project partners.

Nevertheless the development of the ICT Model implies a large effort of contextualization, therefore the Transfer plan has been based not only on the analysis of the literature but also on the collection of local quantitative and qualitative data, through questionnaires and focus groups with local experts and stakeholders.

Thanks to this approach we updated the knowledge regarding demographic trends and emerging social and healthcare needs of senior components of the population in all partner countries (also at a local level), getting acquainted at the same time with existing experiences of integrated healthcare/caregiving provision based on the use of new technologies (inventory of existing and innovative practices in this field).

### 3. Contextualizing the Model

This Transfer plan foresaw a preliminary research on emerging training needs, which enabled the definition of areas of sensible contents, to be dealt with designing training activities according to contextual patterns of service provision.

For an adequate experimentation of transfer model, we considered appropriate since the application form to set up an exploratory survey, in order to identify from the outset and in outline, the topical issues for structuring the model in terms of approach, content, resources and actors. In fact, the ICT project involves the implementation of the test phase in diversified contexts, in order to support and integrate welfare systems, which in turn mean service networks covering a set of different health and social needs. Economic conditions that affect the capillarity and the capacity of services to intercept and take charge. The legislative and regulatory issues that affect the actual functioning of the services. Last but not least the cultural differences in the way underground, affecting operational processes. We wanted to investigate, then, what were the conditions of the context in order to then provide the necessary adaptations, to the experimental model, secondly, we tried to understand what were the needs and habits of the different actors to be involved in the trial, in the field of ICT to develop an approach as possible drawn to measure the real needs of the parties involved. To achieve these goals, we have implemented a preliminary research through the administration of two online questionnaires. One directly to our project partners to investigate the context, as said before. The second direct to health and social services with double purpose: 1) to know which ICT tools are already in use in the various health and social services by operators; 2) investigate for which reasons and needs the caregivers use ICT. Of course it is an exploratory approach and not scientific due to the small sample, in particular for the questionnaire 2 in relation to data on caregivers. The emerging qualitative issues which suggest a synthesis, have been very important for the structuring of training and planning contents and the identification of areas of intervention.

Just to give a view of findings, is possible to report country by country the main topics:

- Italy: **low/medium** use to facilitate daily activities, organize social life and know new people, communication with patient's family, get information on the country.
- Switzerland: **low/medium** use to facilitate daily activities, organize social life and know new people, communication with patient's family.
- Belgium: **low/medium** use to facilitate daily activities and organize social life and know new people.
- Finland: **medium** use to facilitate daily activities, organize social life and know new people, communication with patient's family, providing information for patient's illness, managing relations with patients and parents.
- Poland: **low** use to facilitate daily activities, organize social life and know new people, communication with patient's family.

Areas of contents' intervention in testing phase emerged:

- **Social** (like: social life, family communication). The relational or *Social* area: all the needs related to the processes of socialization of migrant caregivers in the hosting country belong to that area (coping with risks of social isolation), but also the needs related to the maintenance of good and sustainable relationships with family members and friends remained in the country of origin

- Job security (like: welfare needs and local administrative matters). The contractual/welfare or *Job security* area: this area does concern issues related to working conditions and the specific situation of women migrant workers, in order to provide them with tools and above all ability to manage the needs and problems which may arise from time to time, in order to activate knowledge, rights and all the resources provided by the context in which they operate
- Health and care (like: communication with patient's family and connected network. The professional or *Health and care* area: this refers to the specific topics and criticalities faced during professional activities; often people with whom caregivers deal with are affected by several chronic and degenerative diseases linked to the ageing process, which would address the contribution of skilled personnel in the health sector. The local services are involved in some cases, but the caregivers remain the reference point care more present and active. This fact reveals two essential problems relating, on the one hand the importance of making caregivers more effective in their work to the advantage of well-being and safety of their patients, the other problem directly connected to the first, concerns the need to put in connection with the network of services available, so that you can refer through structured and formalized and not extemporaneous, for the needs of users in their care.

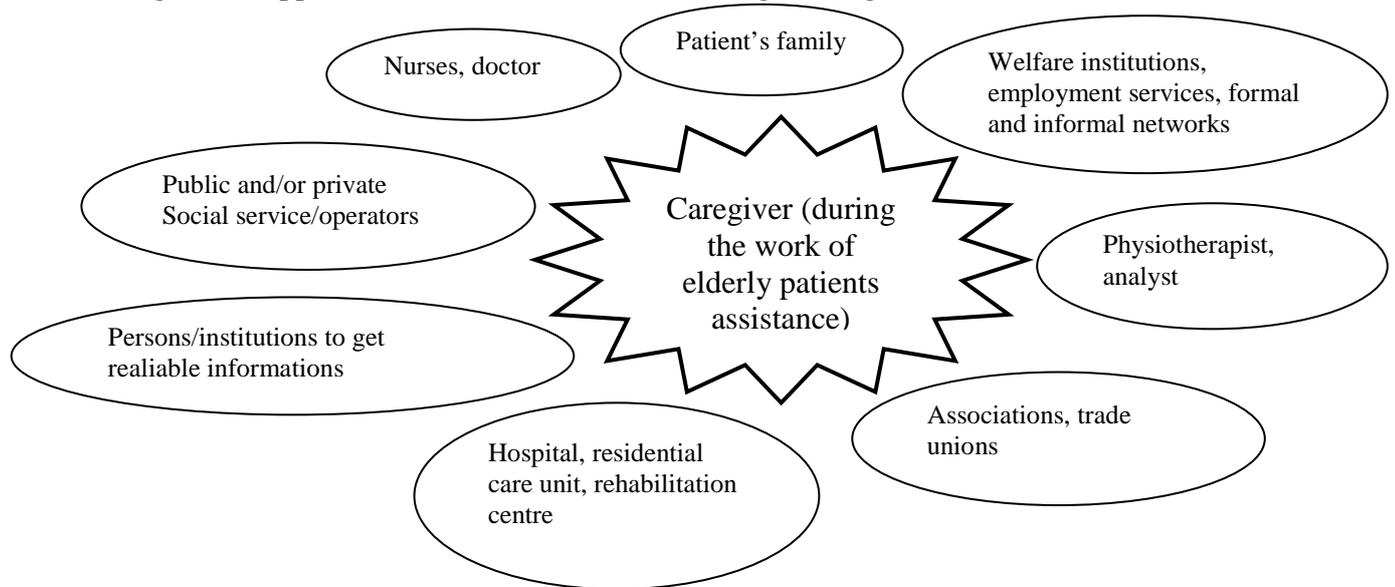
### 3.1 Context analysis and transfer model framework.

Starting from the platform SUFUCA results done from work Finnish partner JEDU, which is characterized as a repository of very useful information for the caregiving work and adding the methodological and theoretical elements mentioned in section 4, ICT project wants to make a step forward, inserting two elements: **interactivity** and **network logic** to which the instruments become a technological mean that connects people and allows to overcome the limitations and obligations of unmediated communication, which for project's target are very important theme in professional, social and personal point of view.

When adopting the above mentioned perspective, this projects' training intervention cannot be understood in the classical sense of "knowledge components transfer": several very different areas and spheres of knowledge have to be covered. Furthermore for various areas the relevant contributions are not necessarily related to a pure knowledge dimension, or may even require pre-requisites, which the target persons do not have (or only in terms of a mere "hands on" experience).

The preliminary study identified convergent and divergent training needs, largely depending from different institutional and socio-cultural contexts of the partner countries. Anyway initial survey gave a important and really topic results, in fact 3 macro areas came to the fore as fundamental pillars, as already pointed out (cfr. section 3), in order to design and implement training paths aiming at enabling caregivers, who often do not have a specific qualification in the health care field and at the same time as migrants are not familiar with the context in which they work, to meet the challenges daily faced during their work experience, on professional, social and personal levels.

ICT training model approach of interaction and networking envisaged:



This raises questions regarding the concrete focus of the training project's pilot tests. The following three major questions/problems related to themes did emerge:

1. **Social:** this area includes needs related to the processes of socialization in the country the caregivers did migrate to, needs linked to the high risk of social isolation including the need to promote user-friendly tools to maintain family relationships with the country of origin.
2. **Job security:** this area does focus on issues related to the working situation and conditions of women migrant workers with the aim to provide them with skills and especially also the ability to manage challenging situations, within their job environment.
3. **Health and care:** this area refers to specific professional activities. Often caregivers are asked to deal with elderly patients who do not only need general care interventions. Their patients are frequently affected by several chronic and degenerative diseases. They thus risk to deal alone with patient situations which should also be addressed by trained health care professionals. The local services might sometimes be involved but nevertheless migrant caregivers risk to remain the sole major reference point in terms of care interventions. It is hence most important to promote caregivers' effectiveness in order to guarantee the well-being and safety of their patients. In this context especially the ability to establish a network with available health care services in the region may become crucial.

With a view to the above, the objectives of the training course, under the transfer of model framework optic, may be summarized as follows:

- A. Solve problems related to the treatment and care of their patients, by using the following skills:
  - a. capacity of analysis of events related to health change and/or health risk;
  - b. ability to consult independent quality health information, and network services by identifying appropriate persons/services according to the needs of their patients.
- B. Interacting with the network of services and professionals, through the use of technologically mediated communication.
- C. Dealing with and resolving own socio-professional needs and problems by knowing and using local resources available (including the use of e-administrative services).

## 4. The teaching and training approach

Taking into account the contexts, the contents and objectives developed so far, the most consistent teaching approach for testing is PBL (Problem Based Learning, see below). PBL is based on the analysis and resolution of problems and is known as a most appropriate methodology as it is flexible, may be applied in a transversal manner and can also be combined with the use of ICT. With PBL the job and life experience of the participants can be valorized and autonomous problem solving skills can be enhanced.

### Structure of the training programme

Situations/problems relevant to:

- problems related to the assistance of patients (two situations)
- problems related to the socio-professional context (two situations)

The scope is not to acquire theoretical knowledge on ICT but to enable participants to experience a efficient problem-solving learning methodology, which also includes ICT tools as a mean.

### Contents

- The PBL method
- Technologically mediated communication
- The analysis of significant problem situations

### Teaching methods

- Analysis of situations
- Lectures
- Self-study

Project stakeholders: caregivers (trained and lay), family members, external tutors, social workers, nurses, etc.

### Aims of training

**Introduction to PBL:** the hours of introduction to PBL are designed to let familiarize involved actors with the proposed educational tool. The participation of all stakeholders should allow to build a shared vision of the methodology and should also allow participants to get to know each other.

**The module on mediated communication:** this module aims investigating the numerous facets of communication through a virtual instrument by using and testing the projects' communication platform. For that purpose participants' consensus finding regarding case building activities and problem solving approaches for emerging difficulties will be enhanced.

**Problem Based Learning:** will be used as a teaching method in order to promote social network building for caregivers. Furthermore the method also enhances autonomous problem solution skills to manage problem situations. In this case "autonomy" must not be understood in terms of "individual action", but as the ability to identify potential health problems and to translate them into concrete questions/work hypothesis, which may then be addressed in an adequate manner.

The ICT training model will exploit potentialities of active learning, and particularly, as mentioned, the **Problem Based Learning (PBL) methodology**. According to the PBL approach, learners work with the members of their group to solve complex and authentic problems that help develop content knowledge as well as problem-solving, reasoning, communication, and self-assessment skills.

Working on problems related to work and daily life help to maintain learners interest in issues and contents of learning, because participants realize that they are learning the skills needed to be successful in a specific field. Almost any learning path can incorporate PBL, but this approach is particularly in case of complex and transformative learning processes, implying questioning our mental frames and what we take for granted (often applying stereotypes and core social representations influencing the way in which we deal with a certain issue). Moreover PBL aims at developing students' intrinsic interest in the subject, enhancing motivation, promoting group-work, fostering cooperative abilities, and help students become self-directed learners.

A key pillar of PBL is the set-up and description of “**ill structured problems**”, with which the learners are expected to deal. Ill-structured problems:

- require more information for understanding the problem than is initially available
- contain multiple solution paths
- change as new information is obtained
- prevent students from knowing that they have made the “right” decision
- generate interest and controversy and cause the learner to ask questions
- are open-ended and complex enough to require collaboration and thinking beyond recall
- contain content that is authentic to the discipline

Therefore a great attention will be addressed during the concrete planning of didactical activities to the definition of such problems, on the basis of a direct needs' analysis involving the target beneficiaries of the course.

In addition, beside the central pedagogical approach of PBL, testing phase will encompass as methodological reference other two main pedagogical methods:

- **Experiential learning.** The training methodology enhances the role of workplace and experiential learning as fundamental means for building up complex competences, as the ones required by the role of caregiver, based on scientific and technical knowledge but at the same time on relational sensitivity and intercultural communication skills. Experience doesn't produce automatically competence, without the activation of reflective loops (Bateson, Illeris, Jarvis), corroborated by solid know how and awareness; therefore the qualification model will be based on the activation of a proper and articulated accompaniment, by using coaches and mentors, reflective journals and diaries, debriefing sessions, peer / cooperative learning (systematic exchange between participants, on practices and critical incidents).
- **Relational, affective and cultural dimensions of learning, and a peer-learning approach.** As far as ICT contents will be treated, a specialized approach “focused on an effective but less flexible acquisition of knowledge and skills strictly linked to the specific professional domain, and a relatively weak cultural base” will be avoided. Methods and tools will be chosen in order to facilitate accommodative and transformative learning processes, and the integration of new ways of thinking and acting in professional behaviors of the caregivers, through the development of social personal and methodological attitudes (Bednarz and Marinoni, 2005).

## 5. Main tools for training testing phase

### 1) PBL tools.

Within the 3 training testing phases (in Switzerland, Italy and Poland) PBL sessions will be developed according to the 7 steps of the model:

<u>The 7 steps model</u>	
First step	<b>Exploring the issue</b> Identify and clarify unfamiliar terms presented in the scenario; scribe lists those that remain unexplained after discussion
Second step	<b>Define the problem</b> Define the problem or problems to be discussed; students may have different views on the issues, but all should be considered; scribe records a list of agreed problems
Third step	<b>Analyze the problem</b> "Brainstorming" session to discuss the problem(s), suggesting possible explanations on basis of prior knowledge; students draw on each other's knowledge and identify areas of incomplete knowledge; scribe records all discussion
Fourth step	<b>Organize the problem</b> Review steps 2 and 3 and arrange explanations into tentative solutions; scribe organises the explanations and restructures if necessary
Fifth step	<b>Formulate learning objectives</b> Formulate learning objectives; group reaches consensus on the learning objectives; tutor ensures learning objectives are focused, achievable, comprehensive, and appropriate
Sixth step	<b>study and personal work + cooperative learning</b> All students gather information related to each learning objective; learners have an exchange between them, and can cooperate in filling in gaps
Seventh step	<b>Sharing the knowledge gained in relation to the problem</b> Group shares results of private study (students identify their learning resources and share their results); tutor checks learning and may assess the group

Each problem will be treated into 2 sessions, integrated by the work done by the learners at distance. During the kick off session the group will go through the first 5 steps, the sixth will be developed at distance, in form of individual work and interaction between learners, reference persons and tutors, the last step will be developed during a final session, in presence with the whole group.

The training path to be piloted will be articulated into different phases, one focusing on the methodology, followed by the proper PBL sessions (4 problems each will be addressed by the piloting groups, according to the following scheme)

Topics	Training activities	Workload (hours)	Actors
<b>Communication in a virtual environment: fundamental tips</b>	Lectures and exercises in the classroom	10	Caregivers , professionals, family members
<b>Problem Based Learning: an introduction</b>	Lecture and discussion	2	Caregivers , professionals, family members
<b>PBL sessions</b> (to be repeated 4 times)			
- Kick off meeting	Laboratory (see first 5 steps of the method)	2	Caregivers, tutors
- Individual work, peer and cooperative learning on the Platform	Collecting information and documents	4	
	Study of didactical materials provided by the tutors	7	
	Counselling provided by professionals of the network	2	
	Project work (elaboration)	5	
- Final session	Laboratory (see 7th step of the method)	2	Caregivers, tutors, other actors (optional)
<b>Self-assessment of the learning process</b>	Brain storming	2	Caregivers , professionals, family members

The hours of introduction to PBL are designed to allow the involved actors, to familiarize themselves with the proposed educational tool, the participation of all stakeholders should allow to build a shared dimension of the methodology and at the same time begin to know each other.

The Transfer of SUFUCA innovative contents to the ICT comprehensive Model implies the shifting from an approach to ICT as a Repository of relevant docs and tools (available to the users, for self-help, as in the original project) towards an approach based on the **integration of ICT in the management of caregiving processes** (by all the actors) and on the constant interaction between the learners during the training process.

## 2) ICT Training platform

The vision of ICT project's training platform is to offer effective tools for exchanging information that can be used in different ways for on-line learning. Chat (textual message exchange) and e-mail are currently the most widespread ones, since they have first arisen in the Internet world. However, new technologies and the use of wider transmitting bands allow to utilize documents, audio/video communication tools in real time as well as to share multimedia contents and to get connected in a learning community.

At first, online learning platforms had to integrate such services. For example Edmodo platform is a useful example to understand how a distance learning tool was structured. Edmodo offers such services as on-line textual chat, videoconferencing, audio chat, application sharing and whiteboards. Once technological problems related to the delivery and implementation of such services was resolved, industries have began to improve platforms by introducing modules and services able to manage pedagogical aspects (associated with the training process) as well as content updating and availability. The most part of contemporary e-learning platform can be viewed as organized into three fundamental macro components: a Learning Management System (LMS); a Learning Content Management System (LCMS); a Set of tools for distributing training contents and for providing interaction.

The LMS integrates all the aspects for managing on-line teaching activities. The LCMS offers services that allow managing contents while paying particular attention to their creation, importation and exportation. The Set of tools represents all the services that manage teaching processes and interactions among users.

A Learning Content Management System includes all the functions enabling creation, description, importation or exportation of contents as well as their reuse and sharing. Contents are generally organized into independent containers, called learning objects, able to satisfy one or more didactic goals. An advanced LCMS must be able to store interactions between the user and each learning object, aiming at gathering detailed information about their utilization and efficacy. When one talks about on-line learning, it is natural to think of interactive media-based contents. Actually, this is only a part of the widespread contents. The contents available before the spreading of on-line learning were mainly documents, and most of them have been proposed as didactic material in HTML format for on-line courses. In addition, interactive media have been sometimes introduced, such as audio, video or training resources created by using other multimedia tools (for example, Flash). A good LCMS should accurately choose the contents to be offered to the student during the lessons as well as the way in which they must be provided. The importance of LCMS is related to the growing distance learning request that is determining a significant increase in content production. The current effort is to avoid a useless duplication of contents by realizing learning objects consonant to given standards in order to reuse them in different contexts and platforms, and this is fully the ICT project optic. All the contents must be appropriately stored in special repositories and be easily accessible and updatable. In fact, a LCMS must be designed so as to enable a constant updating of its contents, allowing this process (if possible) to semiautomatically take place. It is important to point out that, from our point of view, contents are not considered as objects external to the platform but as integral parts of it. This is possible thanks to the services that constitute the learning content management system. The trend towards a growing of training resources, though necessary to better characterize the training process, does not allow the teacher an easy consultation and use of these ones. At the

same time, such an important number of resources can disorientate students that may run the risk of not choosing, during the auto-training phase, the contents more suitable to them. A solution to this problem is given by a more detailed description for each content so as to avoid ambiguity or duplication among them.

Considering the above detailed types of e-learning tools and approached, within the ICT project training process, an essential importance will have the **ICT training platform** with a function in particular of both LCMS and Set of tools aimed at providing interaction.

This tool will work, in order to set up a easy tool to support the training test, in a compatibility optic with the PBL approach.

The ICT learning Platform is therefore the main tool to be developed by the project, in order to set up an easy learning space, compatible with the PBL approach, to be tested during the piloting.

During the testing sessions the platform has to support the activities addressed to carers and their key contact persons, therefore the project will implement a platform hosting contents already available but that would have these additional characteristics:

- synchronous + asynchronous communication possibilities
- possibility to access easily with a video communication (like skype) embedded in the platform
- a simple section with repository
- a section for uploading documents
- if possible, a meta-search engine or, in alternative, a link section to be filled by partners