



Pilot Project Leonardo da Vinci

Managed by HENAM : B/06/B/F/PP-144.008



**Pedagogical  
reference  
framework**

**Methodology  
Glossary**

EUROPEAN  
REFERENCE GUIDE FOR  
COMPETENCES IN NURSING

## PEDAGOGICAL REFERENCE FRAMEWORK

The pedagogical reference framework directly clarifies the pedagogical choices serving the integrated competence-based approach. The integrated reference guide for competences is a **reference framework** which defines the competences to be mobilized by nurses at the end of their training. By «reference framework» we mean an institutional, contextual projection as well as a projection for referentialization (Figari, 2004). The aim here is to define formal guidelines in terms of reference guides in order to develop a coherent, but also dynamic pedagogical approach which can be updated according to the evolution of the profession and of society.

This way, integrated reference guides for competences are used as **tools** for building integrated reference guides for training and assessment.

The term «integrated» implies the existence of coherence between the pedagogical objectives, functions and means implemented. The emphasis is on integration, the global nature and the authenticity of situations while building competences as well as when exploiting them during training and assessment (Parent F., 2008).

The integrated reference guide for competences uses the paradigm of knowledge construction: the **socioconstructivist paradigm** (Jonnaert P. 2004).

The socioconstructivist option is based on the following premises:

- The student **builds their knowledge**. This knowledge:
  - is temporarily viable and not defined once for all
  - results from a **reflexive practice** and is thus not admitted as such without being called into question
  - is linked to **contexts and learning situations**.
- **The student develops their knowledge** progressively in the style of a true construction based on previous knowledge, by establishing **links** between that knowledge and the various realities which the student is confronted with.

Training should be organized around the functions of the integrated reference guide for competences. These functions are classified according to their level of integration, i.e. their level of decreasing complexity: the continued objective of integration, situations families, competences and capacities together with criteria/indicators. This classification should enable disciplinary integration and result in learning and evaluation methods adapted to each level.

Parent F. *Formation, compétences et constructivisme: le référentiel d'évaluation, outil de cohérence dans les programmes de formation en santé*. Publication pending in the «Pédagogies en Développement» series, De Boeck, 2008.

## METHODOLOGY

### METHODOLOGICAL STEPS IN BUILDING REFERENCE GUIDES FOR COMPETENCES\* USING THE INTEGRATED COMPETENCE-BASED APPROACH

The integrated competence-based approach\* is based upon **8 different methodological steps** (see *Diagram A and B*) which include strategic and process dimensions (see F. Parent *et al*). Within the CRESI\* Project, the 5 first steps have been worked on in priority, however bearing in mind that the remaining steps are necessary for the implementation of a competence-based reform. The European reference guide created within the CRESI Project presents five reference guides for competences specific to each of the five partner countries, as well as one generic reference guide. This way, not only coherence, diversity and appropriation are valued, but also mobility.

These steps, however successively presented, are the object, throughout a process of participative construction, of various crossings and frequent back and forth movements.

**The first step** of such process requires from us that we define in which health/society organization(s) future professionals will work. Clarifying health objectives requires defining, on a consensual basis, the visions which will serve as main thread while building the integrated reference guide for competences. Who do we mean to train, at what level, for which profession, and using which philosophy on the use of competences? These are fundamental questions which enable us to identify the basic values which are then revealed. This work leads then to the building of

a *health framework* completed by a *list of qualitative criteria and their definitions*. Starting from this list is how we will be able to establish evaluation criteria in a later methodological phase.

**The second step** consists of acquiring a meta vision of the process and training. The aim here is to visualize the issue of training in a systemic context which implies various realities (*Diagram C*). This visualization consists of pinpointing administrative realities – i.e. existing norms – , professional realities experienced by professionals on their practice fields, populations' needs for healthcare, the limits of existing programmes and to question the social responsibility of training institutions. This approach helps us to better understand the necessary contextualization of training. The involvement of several groups of players is also an issue in the quality and implementation of changes. This is how this second methodological step leads us to the identification of the representative players of the issue; these players will directly be concerned by the building of the reference guide for competences. The players who took part in the CRESI productions are listed in the reference guide for competences of each participant country. It is important from the beginning to project oneself on the organization and production/validation mechanisms by acquiring a participative and representative vision.

**The third step** aims to clarify one's pedagogical and production paradigm\*. The choice of a socio-constructivist paradigm\* refers to the fact that it is the individual themselves who builds their own knowledge. This logic also prevails in the approach of co-construction of reference guides. It is based on socio-constructivist monitoring by pilot teams and requires the implementation of mechanisms leading to a «participative research» style of approach which support the pedagogical

\* The asterisk refers to a definition in the glossary.



objectives of the reference guide for competences. Decision making will indeed be supported by a critical mass of players representing changes. This way, coherence, pertinence, integration and concept assimilation will be ensured. The formalization of a *pedagogical framework* is an integral part of the reference guide, as it is the case in the CRESI Project.

The definition of competence\* is the **fourth step** towards the construction itself of the reference guide. This specification of the concept of «competence» is essential since this concept will be largely used. In the case of the CRESI Project, the reference used is that of JM. De Ketele (*Diagram D*).

**Step 5** consists in the production of an integrated reference guide for competences\* and is divided into 7 sub-steps or beacons, which have been used during the creation of the reference guides of the CRESI Project (*Diagram B*).

- The first sub-step begins with the description of the organization(s) in which professionals work, followed by the **identification of functions, of professional activities and professional situations\***.
- Sub-step number two aims at the **description of the function and professional activities**, starting, among others, from professional situations. This is the phase for **collecting and listing data in the shape of action verbs**. Special attention should be given to the exhaustive character of this data collection, among others by asking professionals to describe their professional situations themselves and by resorting to norms and legal texts. Explication interviews (Vermersch, 1994) and content analysis are the preferred methods for qualitative analysis of data. The product of this work is what we call the reference guide for professional activities\*.
- Sub-step number three consists of **categorizing activities** according to their type and to the type of underlying knowledge. The categorization used here is that of P. Charlier (2003) into cognitive, reflexive, procedural, psycho-affective and social activities, which are also classified according to the observability level of the action verb, going from the most general one to the most precise one.
- Sub-step four consists of **pinpointing competences or macro-capacities\***, starting from non-observable activities of each category of activities.
- Sub-step five, i.e. **integrate competences**, will help us to specify the *situations families* and allow the reference guide for competences construction process to clearly identify the elements which make up the analytic approach of the competence\* and the situated approach of the competence\*. *Diagram E* presents the integration of these two approaches of the competence developed within the framework of an *‘CBA*. Starting from functions and professional situations already identified during the step of data collection, it is necessary to pinpoint the different categories of situations families\* (*Diagram F*). The crossing between situations families and competences or macro capacities also helps us to check the integration and coherence between these two essential components of the integrated reference guide for competences and refine its writing. Situations families are indeed defined so as to show the context, the activities to be carried out and the practice conditions of these activities. The synthesis of situations families enables us to extract from it the *continuous integration objective\**, i.e. the global profile expected from professionals.
- Sub-step number six consists of **structuring capacities\* and criteria\* and indicators\***. The aim here is to identify, starting from observable or precise activities, the capacities which make up each of the competences. The

identification of criteria and indicators is made using the reference grid of qualitative criteria and their definitions (link with step 1: clarify one's healthcare objectives) and of precise action verbs originating from the data collection and from already worded capacities. Likewise, these criteria are confronted and allocated to situation families in which competences and capacities will be mobilized. This methodological crossing ensures coherence in choosing criteria/indicators between capacities, situation families and the health framework.

- Sub-step number seven, the last one, consists of bringing back the methodological **validation\*** steps which need to be implemented involving the players of the process (intern validation) and the external players (extern validation).

The following steps (steps 6, 7 and 8) of the *‘CBA* help us to analyze and work on the links existing between reference guides for competences, for training and for assessment (*Diagram A*). In the case of the CRESI Project, these steps were dealt with from a methodological point of view and, as far as their implementation is concerned, are left to the responsibility of each partner country. The declination of the reference guide according to a progressive «complexity level» logic (e.g. year of study) is also to be defined by each institution in the operationalization phase.

**Step 6** analyzes how to ensure didactic transposition\* in coherence with the integrated reference guide for competences. Building an integrated reference guide for training means seeing to it that all the contexts and learning methods (classes and internships) correctly aim at the building and integration of competences in coherence with the situation families previously identified. The reference frameworks of such methods are active pedagogy theories and socioconstructivism (see pedagogical framework). Likewise, building an integrated reference guide for assessment\* means seeing to it that assessment focuses on all learning objectives, i.e. not only on knowledge, capacities and competences or macro capacities, but also on the mobilization and integration of these resources inside situation families and the continuous integration objective. It also means implementing continuous and varied assessment methods using the criteria/indicators of the integrated reference guide for competences, all this within a qualitative assessment logic.

**Step 7** focuses on the central and strategic issue of the teachers and players of such changes. **Train and involve the teachers and players** of this type of process represents a strategic axis to be considered right from the start, among others by encouraging participative approaches when building the new programme but also by implementing exchange/training places which meet the identified needs of the system and of its players.

The last step of the *‘CBA*, **step 8**, suggests that we systematically consider the need to **set up a quality observatory** at the institutional level where we belong. The issue here is to ensure the implementation of long term quality management mechanisms which are based on the updating of reference guides according to normative changes, to professional practices but also to the evaluation of the tools by users themselves (teachers, internship monitors, students). The aim is to regulate, in a dynamic and flexible logic, the adequacy and quality of training compared to the needs and expectations of society and healthcare professionals.

Diagram A

**Programme of activities and (back and forth) steps in the construction and implementation of a competence-based curriculum (by F. Parent *et al.*)**

- Step 1.** Clarify one's (healthcare) objectives
- Step 2.** Integrate a «META» vision
  - 1. of the training
  - 2. of the process
- Step 3.** Clarify one's paradigm
  - 1. pedagogical paradigm
  - 2. production paradigm
- Step 4.** Specify one's definition of the term «competence»
- Step 5.** Start producing an integrated reference guide for competences (IRGC): 7 steps (see Diagram B)
- Step 6.** Carry out didactic transposition in coherence:
  - 1. build an integrated reference guide for professional activities (IRGPA)
  - 2. build an integrated reference guide for assessment (IRGA)
- Step 7.** Train/integrate trainers/actors
- Step 8.** Institute a quality «observatory»

Diagram B

**Step 5: Integrate the production/construction of an Integrated Reference Guide for Competences (IRGC) 7 steps to guide you (back and forth)**

**Sub-step 1: Identification of professionals' function(s) within their organization, description of their organization and checking of the adequacy of the process**

- 1.1. Identify healthcare professionals' main function and/or professional activity and/or job. Identify professional situations.
- 1.2. Describe the organization(s) in which the professional carries out their activities.
- 1.3. Adaptation of the process and of the players concerned by this change.

**Sub-step 2: Description of the function and professional activities**

- 2.1. Collect data.
- 2.2. Make a list of the data collected using action verbs.

**Sub-step 3: Categorization of activities**

- 3.1. According to the type of activities and the type of knowledge and according to the level of observability.

**Sub-step 4: Pinpoint competences**

- 4.1. Pinpoint competences starting from non-observable activities of the various categories.
- 4.2. Give a definition for each competence (to be specified with the identification of capacities, sub-step 6).

**Sub-step 5: Integrate competences**

- 5.1. Pinpoint the various categories of Situation Families starting from the concerned professional's functions and practice places.
- 5.2. Write situation families.
- 5.3. Cross competences and situation families.
- 5.4. Write Continuous Integration Objectives.

**Sub-step 6: Structuring of capacities**

- 6.1. Within each competence, and starting from observable and precise activities, identify capacities (or competence stages) composing those competences.
- 6.2. Identify the criteria/indicators for each stage or capacity (sources: grid of criteria and their definition and precise action verbs).

**Sub-step 7: Validation of the IRGC**

- 7.1. Internal validations by the pilot group, more or less representative of the change pursued depending on the contexts and constraints.
- 7.2. External validations together with the players representative of the change pursued.

Diagram C

**Adequacy triangle in human resources management in the health sector (short version)**

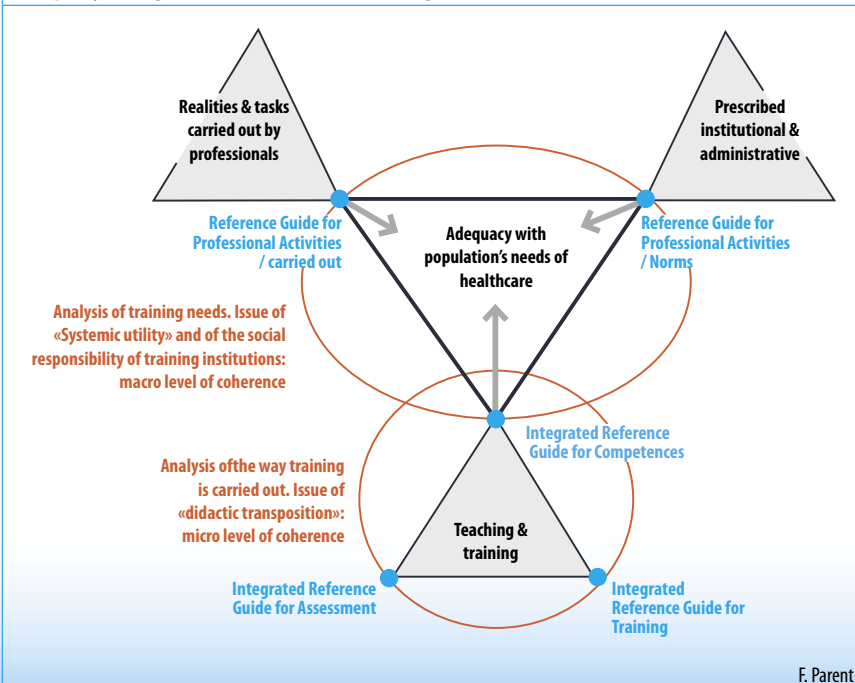


Diagram D

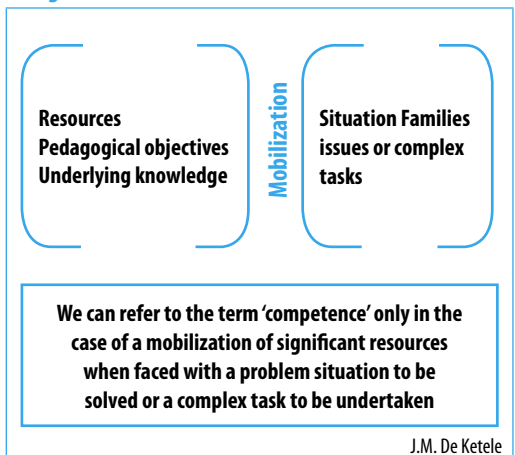
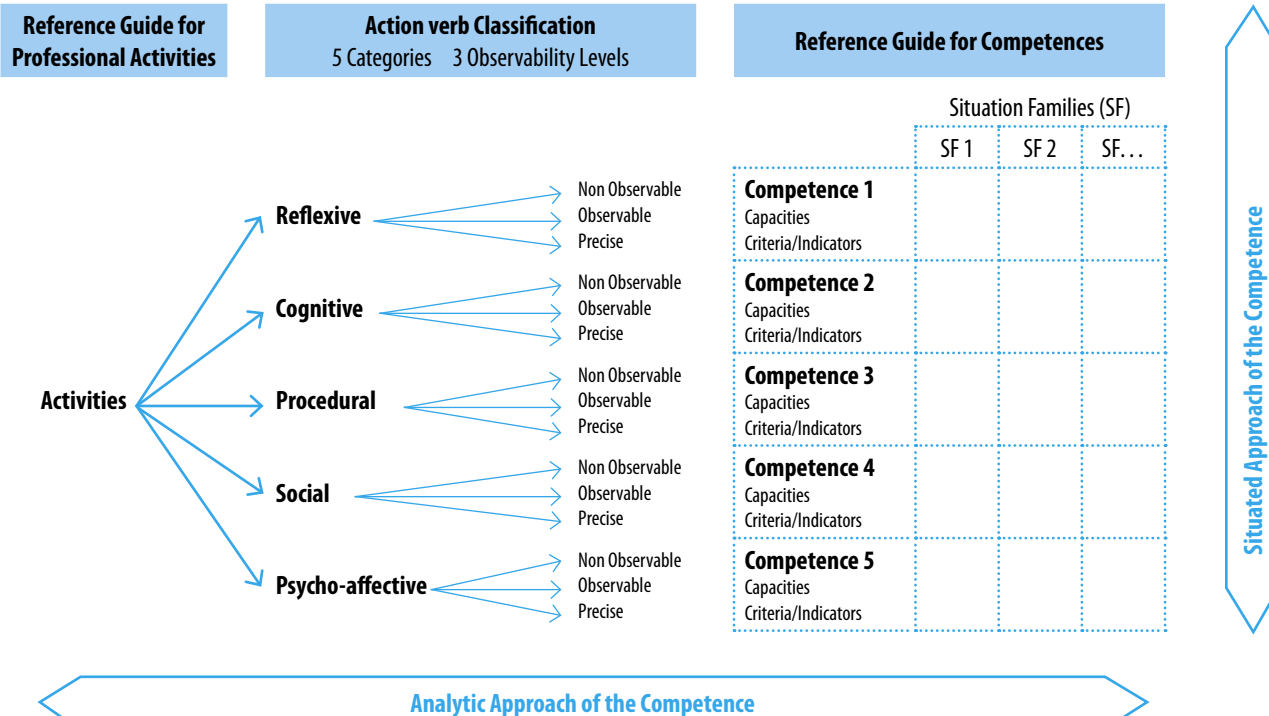


Diagram E

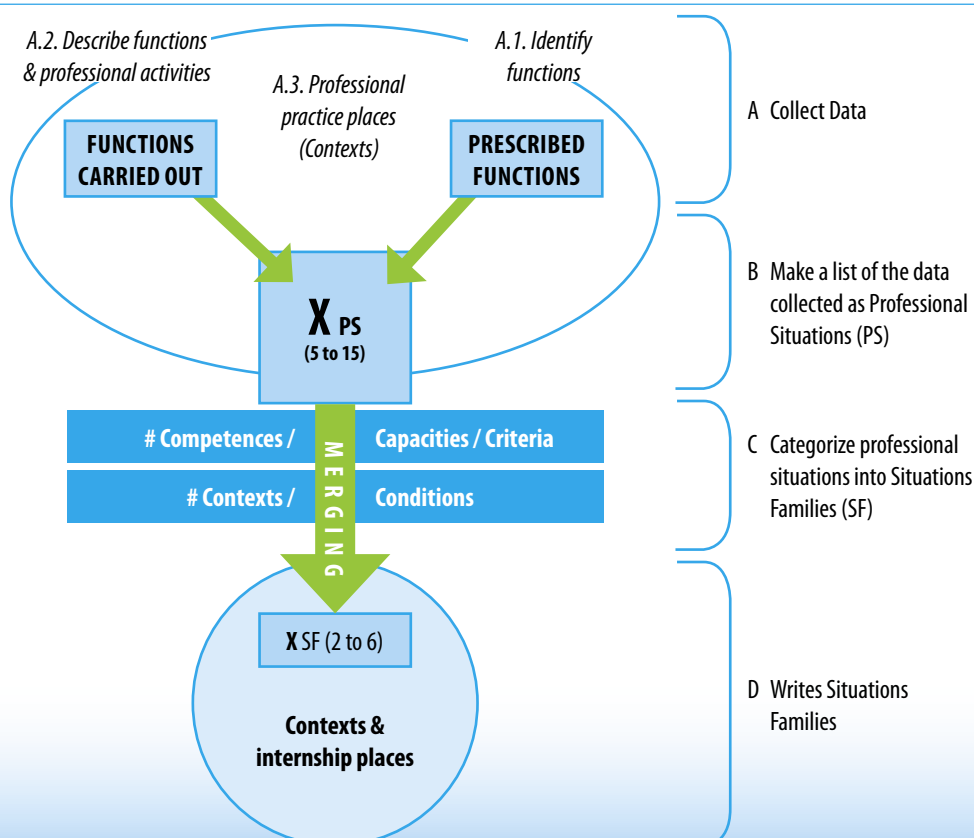
Visualization of the crossing between the analytic approach and the situated approach within the framework of the Integrated Competence-based Approach (<sup>i</sup>CBA)



C. Dury et al.

Diagram F

Construction of Situation Families (SF) within an Integrated Competence-Based Approach (<sup>i</sup>CBA)



F. Parent et al.



## Analytic Approach of the Competence

Approach based on the categorization of the activities of a job or of training. The categorization is made as follows: on the one hand by cognitive, reflexive and meta-cognitive competences and procedural, psycho-affective and social competences and on the other hand by observability level of the action verb (Charlier P., 2003). It is then possible to identify key competences and capacities for each competence.

## Capacity

A capacity is a (cognitive, reflexive or meta-cognitive, procedural, psycho-affective or social) approach to be mobilized in order to carry out a competence. Learning a capacity represents an essential resource in developing a competence.

## Competence

Mobilization of pertinent resources (resources, pedagogical objectives, underlying knowledge) when facing problematic situation families to be solved or complex tasks to be carried out.

In the analytic approach, a competence is a macro-capacity considered as essential in mobilizing pertinent resources when facing problematic situation families to be solved or complex tasks to be carried out. In the situated approach, a competence is a well-considered know-how which consists of mobilizing the necessary resources in a situation in order to solve this problematic situation or carry out a complex task (De Ketele JM., 2008).

## Continued Integration Objective

Result expected from the training for each year of study. It represents the student's global profile as it is built throughout the whole learning process. The continued integration objective of a training unit is the summary of the situation families contained in this unit.

## CRESI

Création d'un référentiel européen de compétences en soins infirmiers = Creation of a European Reference Guide for Competences in Nursing.

## Criteria

Quality of a production and/or piece of work. A criteria is not always directly observable and must be accompanied by specific indicators which specify it.

## Evaluate/Assess

Collect pieces of information which are pertinent, valid and reliable enough, examine the level of adequacy between this information and various criteria which correspond to the objectives set at the beginning or adjusted on the way in order to take a decision (De Ketele JM., 1989).

## Health Education

Health pedagogy serving the community; it implies the implementation of any means capable of creating positive motivations towards health, of raising individuals' and groups' awareness on the possibility to act individually and collectively in order to improve and promote health, of raising their awareness on their responsibility for their own and other people's health, and of helping them adapt their behavior in order to reach this objective. This action develops itself according to a permanent exchange process between the people who take the initiative of the education action and those who the action is aimed at, continuously alternating their respective role. This already visionary definition leads us to that of health promotion and even goes beyond communication or normative behaviour change pedagogy. Health education tries to stimulate motivation and self-confidence (perceived self-efficiency) as well as to develop the necessary representations and beliefs in order to improve health, all this within respect of others and of their culture and with a wish to reduce inequalities. Health education understands the term "education" as "critical knowledge" which develops capacities in understanding underlying social, economic and environmental conditions which affect health, as well as the various risk factors and risk behaviours and the use of the health system. The next phase is then the identification and development of individual, familial or community solutions on the basis of one's individual and social capacities.

## Health Promotion

Process which gives populations the means to ensure a better control of their own health and to improve this health. It is a positive concept enhancing social and individual resources as well as physical capacities (environment). In this way, Health Promotion is not only a matter for the health sector: it goes beyond lifestyles and aims at well-being. (World Health Organization, 1986, The Ottawa Charter for Health Promotion).

## Health System

All the intertwining elements which contribute to health at home, at work, in public places and in communities by influencing the physical and psycho-social environment as well as the framework of the health sector and other associated sectors.

## Indicators

All the observable elements linked to a criterium and which show what has to be observed, measured in a production in order to evaluate it.

When the criterium is general and abstract, the indicator is contextualized and concrete. The indicator

is what – in the student's production – brings information on their mastery of the competence (Gérard FM., 2005).

## Integrated Competence-Based Approach ('CBA)

Method for building curriculums according to the logic of competences based on a strategic approach which includes learning objectives, functions and means in terms of result and process. The position of the 'i' makes it clear that the integration is situated on the level of the approach as well as within the reference guide and the competences.

An adapted 'CBA taxonomy has been developed (Parent F. *et al.*, 2008).

## Integrated Reference Guide for Assessment

Reference document focusing specifically on assessment. The integrated reference guide for assessment includes the description of situations and evaluation criteria. Assessment is made on all learning objectives, as well as on the mobilization and integration of these resources inside situation families and the continued integration objective.

## Integrated Reference Guide for Competences

Reference framework for training and assessment which gives an updated vision of the expectations of a programme, in the shape of competences.

## Integrated Reference Guide for Training

Reference document presenting the structure of the training programme for each year of studies in terms of course and teaching/learning methods. The notion of integration ensures that all the contexts and learning methods (classes, internships, seminars, speech groups, etc.) clearly aim at the building and integration of competences in coherence with the situation families identified (Rwanda Reference Guide).

## Nursing Care

Healthcare provided, autonomously or through collaboration, to individuals of all age, to families, groups and communities – ill or healthy – regardless of the environment. Among a nursing staff's essential roles: defence, promotion of a healthy environment, participation in the implementation of health policies and in the management of health systems and patients, as well as education.

(International Nurse Council) This healthcare, which is provided autonomously and in collaboration, concerns various areas in health promotion, education, prevention of diseases, curative/palliative/rehabilitation healthcare (see health framework).

## Nursing Diagnosis

Wording of a clinic judgement on the reactions to a person's/a group's/a community's existing or potential



health issues as well as their reactions to life processes. Nursing diagnosis complements medical diagnosis. [...] It focuses on the person's needs and not directly on their pathology (North American Association for Nursing Diagnosis).

---

**Paradigm**

Representation of the world, way to see things, coherent model of vision of the world which leans on a definite basis (disciplinary matrix, theoretical model or thinking trend).

---

**Partnership**

Active association of various participants who, although they stay autonomous, accept to put their efforts in common in order to reach a common objective linked to a problem or a clearly identified need in which, in accordance with their respective mission, they have an interest, a responsibility, a motivation, or even an obligation.

---

**Person**

Unique, responsible, free being with expectations and needs, continuously changing being in interaction with their environment. The person evolves in search for a quality of life which they define according to their own potential and priorities.

---

**Professional Situation**

Situation to be dealt with by professionals in their discipline. Situation which they are responsible for and for which they have the necessary competences.

---

**Reference Guide for Professional Activities**

List of the activities and tasks which make up a given profession and/or function. In this case, all the activities and tasks expected from healthcare professionals in reference to a given health system. It is established starting from reality as experienced by healthcare professionals as well as prescribed and normative tasks present in the health norms of a country (Parent F., 2006).

---

**Situated Approach of the Competence**

Approach based on the identification of situations families which give a meaning to learning objectives and help to determine these objectives in coherence with the needs of the system (society) in which the programme is being built.

---

**Situation Family**

Group of professional situations showing enough common characteristics to mobilize the same competences and capacities in identical conditions. These situations are common and must be correctly managed by students during internships. They represent the various functions which the student has to face by mobilizing their various competences.

---

**Socio-Constructivist Approach**

Contemporary movement in learning psychology. The socio-constructivist perspective starts from the postulate that learning is an intentional activity for the treatment of the information and the building of sense. The student builds their knowledge on the basis of existing knowledge. Learning contexts and interrelations play an important role and ensure knowledge transferability (Jouquan J., 2006).

---

**Supervise**

Pedagogical support practice which takes place individually, in small groups or in teams. It is aimed at people in training or at professionals. Its foundation stone is a relationship ruled by a contract (duration, rhythm, objectives, evaluation method, confidentiality, financing) between a supervisor trained to do so and one or several supervised person(s). The aim of supervision is to improve professional competences by standing back, solving and methodically analyzing professional situations (De Jonckere C., 1996).

---

**Therapeutic Education**

Relatively recent health practice which has progressively been integrated in the taking care of patients suffering from long term pathologies. Beyond its role of prevention of disease complications, educating the patient represents a change in health conceptions according to which the patient is capable of being their own doctor during a given period. The idea is far from being new; indeed, health education was already based on the principle that the first agent of health is the individual themselves. However – and on the opposite of health education – therapeutic education of the patient is, by definition, aimed at patients suffering from chronic diseases for whom learning competences and health behaviours is essential to their survival. Indeed, the implementation of such behaviours by the patient might delay the complications due to their pathology but also reduce their dependence by helping them integrate their disability in their daily life. The patient's motivation to learn is influenced by their living context, their level of acceptance of the disease, their capacities and their fitness. The patient is, for all these reasons, a particular learner who requires adapted pedagogy (...). Therapeutic education of the patient represents one of the more significant developments in health education for many categories of patients. It is establishing itself as an epidemiological, therapeutic, economic but also ethic as necessity with a view to give the patient all the cognitive and technical means to co-manage their disease. It is characterized by a real planned and organized transfer of competences from the nurse to the patient and falls within the scope of a perspective

in which the patient's dependence progressively gives way to their increasing responsibility and partnership with the nursing team (D'Ivernois J-F., Gagnayre R., 2004).

---

**Validation**

Process which ensures the scientific nature of productions within the framework of quality management. Since validation mobilizes a large number of people representative of all the sectors of the profession, it also enables the integration of the content and of the building methods of a reference guide.

---



# Pilot Project Leonardo da Vinci

Managed by HENAM : B/06/B/F/PP-144.008



This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

RESPONSIBLE EDITOR : **Albert Leroy, HENAM**

REGISTRATION OF COPYRIGHT : **D/2008/11.661/2**

GRAPHIC DESIGN : **Nathalie da Costa Maya, CDCS asbl, Bruxelles**