HCEU competence development matrix "NURSING"

Authors: HCEU project consortium

16 December 2016
v.6, final version
www.project-hceu.eu

Co-funded by the
Erasmus+ Programme
of the European Union

The HCEU project

More than any other sector the healthcare sector is already today dependent on the mobility of workers from across Europe and even on an international scale in order to overcome skill shortages that are strongly influencing this sector in EU Member States. So far the mobility of skilled workers is strongly hindered by highly complex and time consuming validation and recognition processes and by missing transparency among healthcare qualifications in the European Member States. HCEU makes a major contribution towards transparency of healthcare qualifications across borders and facilitates processes to formally recognise and validate healthcare qualifications acquired abroad as well as through in- and non-formal learning within different healthcare recognition and validation systems in the European Union.

For this purpose the HCEU consortium makes use of the highly awarded and already in many cases practically applied VQTS model. The VQTS model does not focus on the specificities of national VET systems but uses learning outcomes and work processes to enhance transparency. It provides a 'common language' to describe competences and their acquisition and a way to relate these competence descriptions to concrete qualifications/ certificates and competence profiles of individuals. The VQTS model relates on the one hand to the work process and follows on the other hand a 'development logical' differentiation of a competence profile. This makes it an ideal and comprehensive tool to appreciate the lifelong learning of healthcare professionals in the context of formal recognition processes.

Based on this approach HCEU develops VQTS matrices, profiles, tools and instruments for the healthcare profiles 'nurse' and 'carer for the elderly' for the national contexts of the project partners and in order to facilitate recognition praxis in between those European Member States. In addition HCEU develops transfer kits in order to facilitate the transfer of those tools also to other national (within and beyond Europe) contexts and to other fields within healthcare. Those tools are expected to make a major contribution to the work of VET providers and recognition bodies/authorities involved in transnational mobility of healthcare professionals. In this way HCEU facilitates the establishment of a European labour market that helps to overcome skill shortages and high unemployment rates through fostering mobility of healthcare professionals across the European Member States.

Project coordinator:

DEKRA

DEKRA Akademie GmbH
B2 Business Development International
Handwerkstrasse 15, 70565 Stuttgart (DE)
Project contact: Claudia Ball (claudia.ball@dekra.com)
Project website: www.project-hceu.eu

Co-funded by:

Co-funded by the Erasmus+ Programme of the European Union

ERASMUS+/ KA 2/ Strategic partnerships
Project duration: Sep 2015 – Aug 2018
ERASMUS+ grant agreement no: 2015-1-DE02-KA202-002316

Introductory information: The VQTS model

Comparing training programmes and understanding qualifications from the VET systems of other countries is one of the primary education and training challenges in Europe, as there are various established national approaches, concepts, and traditions for designing and describing qualifications. The VQTS model is one approach to tackle this incomparability by focussing on work processes (Luomi-Messerer 2009, p. 10-11)[1]. The VQTS model assumes that although there are differences between national approaches in how training is offered and organised, it is possible to identify many similarities in the tasks of modern work processes. For example, different professions in different countries tend to apply similar material, technologies, and processes. Thus, occupational requirements, the core work tasks including the required vocational or professional competences in a respective occupational field, are often easier to compare than different national training programmes in terms of achieving the required competences. Therefore, "the VQTS model provides a 'common language' to describe competences and their acquisition and also offers a way to relate these competence descriptions to the competences acquired in training programmes" (ibid., p. 10-11).

The VQTS model uses a 'development logical' differentiation of competence profiles and can be used for describing the acquisition of competences. The core elements of the VQTS model are the 'Competence Matrix' and 'Competence Profiles'. In the following, these two elements are described in more detail.

Competence Matrix

The main aim of a Competence Matrix is to enhance transparency of competences and qualifications and to foster mutual understanding between different countries and different contexts in the comparison of qualifications. In a Competence Matrix, learning outcomes related to an occupational field are presented in a table. The vertical axis of the Competence Matrix contains the 'competence areas', based on the various core work tasks of the respective professional field. The horizontal axis shows the 'steps of competence development' described in the form of learning outcomes, which indicate the progress of competence development from beginner to expert. The learning outcomes are described as professional competences which provide information about which core work tasks a person is able to carry out in a specific work context (Luomi-Messerer 2009, p. 10f). When developing a Competence Matrix, several aspects have to be taken into consideration. First, the occupational field in which the Competence Matrix is to be developed must be selected and the professional and educational profiles that will be included in the matrix should be determined. Second, experts should be involved in the development process.

Experts that should be consulted are experts who are able to provide support in applying the VQTS methodology, as well as practitioners from the occupational field (from both the world of work and the world of education) from different countries, to ensure that transnational competence areas (core work processes) and steps of competence development are identified effectively. Third, the competence areas of the respective occupational field should be defined. As mentioned above, the foundations of these competence areas are core work tasks which are comprehensive tasks undertaken by an individual within the work context of the respective occupational field. Rather than drawing on subjects from traditional subjectbased curricula, the

[1] The VQTS model was initially developed in the Lifelong Learning project 'VQTS' (Vocational Qualification Transfer System) and was further refined in the follow-up project 'VQTS II'. Cf. http://www.vocationalqualification.net/ (08.01.2016).

core work tasks should be derived empirically from the working world (work practice/work place). A varying number of competence areas are to be defined on the basis of the work tasks, depending on the complexity and range of activities or job opportunities within the respective occupational field. Fourth, the competence development steps for each competence area are to be described. Competence development steps illustrate the process of progression from the lowest to the highest step of competence development. Between two and six successive competence development steps should be defined, depending on the complexity of the respective competence area. Therefore, no concrete number of steps can be pre-determined. This means that the steps only make sense within one single competence area (horizontally), and the numbers of steps of competence development for one competence area do not necessarily correspond with the steps of another (ibid., p. 15).

A Competence Matrix is a flexible instrument as major changes in the respective occupational field can be accommodated and acknowledged by adding or removing elements, or undertaking a restructuring process. The titles of the competence areas should be chosen in such a way that they promote mutual understanding and are comprehensible to experts working in the occupational field (ibid.).

Competence Profiles

Through the use of a Competence Matrix, competence profiles can depict the stages of competence development to be achieved throughout a training programme, or the stages already achieved by a learner or a graduate of a training programme. These profiles are formed from particular parts of the matrix and generally cover a limited range of the total competences described in the matrix. The competence profiles are developed by identifying the competences that are part of a specific training programme or qualification (Organisational Profile), or by reflecting the competences already acquired by a person currently in training or having completed a programme or qualification (Individual Profile). The competence profiles refer only to the competences described in the Competence Matrix (ibid., p. 44). The development of competence profiles requires an interpretation against the background of the specific training and work context. The crucial issue is how well a curriculum or training plan can be mapped in the Competence Matrix. Since the competences described in the Competence Matrix are derived from work processes and are not explicitly related to specific subjects of a curriculum or a training plan, the mapping process is easier in cases in which a training programme or qualification is developed and described in a competence-based or learning-outcomes-based manner.

Organisational Profile

The Organisational Profile represents the breadth and scope of competence development that can be achieved within a specific VET programme. Organisational Profiles indicate the ‘relevant’

competences of the specific training programme in the Competence Matrix. In this context, 'relevant' means that learners (participants of the particular training programme) will acquire the competences indicated in the Organisational Profile.

Typically, Organisational Profiles are developed by the authorities responsible for a training programme. Those involved in the development process, should have in-depth knowledge on the curriculum or training plan as well as a strong understanding of the core work tasks expected of a graduate of the respective training programme. Therefore, the development of Organisational Profiles should include the participation and input of individuals involved in the training process (for example, teaching and training personnel or people with similar functions), representatives from the working world, and graduates or persons in training).

Individual Profile

An Organisational Profile helps to identify the competences that will be/have been acquired by a learner or graduate of a particular training programme. An Individual Profile however, allows for the identification of competences already acquired by an individual at their current stage of learning. Teaching and training personnel familiar with the competence development process during the training programme should be involved in terms of indicating the Individual Profile in the Competence Matrix. The Individual Profile can be developed at any time during training, and could perhaps be undertaken at the end of semesters when examinations are conducted, as this could prove a useful indicator in evaluating the competences already acquired by a learner.

The HCEU matrix „NURSING"

Starting point for the development of a matrix is the definition of the professional profile to be covered. In the case of the HCEU matrix on "NURSING" this starts with the first (certifyable competence development step up to the registered nurse with different levels of work experience and professional specialisaton. Related core work tasks have been identified as follows:

- Research and analysis of relevant literature (such as BENNER 2012; EFN 2015)
- Analysis and results of relevant European project (such as "Tuning"[2], "Proper Chance"[3])
- Analysis of national professional profiles and descriptions oft he professional „Nurse" from the projects partner countries (Austria, Germany, Greece, Poland, Hungary) as well as from the United States, the United Kingdom, New Zealand and Canada
- Expert interviews with nurses and representatives of initial and continuous vocational training
- Expert workshop with representatives of initial and continuous vocational training as well as nursing praxis

The identified core work tasks and work processes have been clustered into competence areas. A competence area includes different kinds of competences necessary in order to fulfill core work tasks in this area. The matrix has been validated through expert consultation as well as validation workshops with Austrian, German, Polish, Greek and Hungarian experts.

The following competence development areas have been identified:

1. Assessment, diagnosis, care plan
2. Nursing Care
3. Nursing intervention
4. Creating & maintaining a health-promoting and safe environment

[2] www.ash-berlin.eu/hsl/freedocs/210/Pflegeausbildung_in_Europa[1].pdf (31.10.2016).

[3] www.proper-chance.eu (31.10.2016): Proper Chance. Implementing ECVET in the field of health and social care.

5. Professional communication &collaboration with multidisciplinary team/other healthcare professionals
6. Communication & collaboration with patient/client and relevant others
7. Management

The following cross-cutting competence areas have been identified:

A. Monitoring, documenting, evaluating the care process & quality assurance
B. Ethical , intercultural & legal competence
C. Continuous professional development and lifelong learning

It is possible to describe for every competence area steps of competence development. The number of steps can vary from competence area to competence area und includes usually two to six steps. This structure consideres progress in competence development as well as increasing level of work task complexity and requirements.

Sources:

BENNER, P. E.: Stufen zur Pflegekompetenz. From Novice to Expert. Verlag Hans Huber 2012.

EFN-Leitlinie für die Umsetzung von Artikel 31 der Richtlinie über die gegenseitige Anerkennung von Berufsqualifikationen 2005/36/EC. Brüssel 2015 – URL: www.dbfk.de/media/docs/download/Internationales/EFN-Competency-Framework-German-29-09-2015.pdf (Stand 27.10.2016)

LUOMI-MESSERER, K. (Hg.): Using the VQTS model for mobility and permeability. Results of the Lifelong Learning project VQTS II. 3s. Wien 2009

For further information on this publication please get in touch with:

Claudia Ball
DEKRA Akademie GmbH

Handwerkstr. 15, 70565 Stuttgart, Germany
E-mail: claudia.ball@dekra.com
Telephone: +49.711.7861-0
URL: www.dekra-akademie.com

Sabine Schwenk
3s research laboratory

Wiedner Hauptstraße 18, 1040 Vienna, Austria
E-mail: schwenk@3s.co.at
Telephone: +42.1.5850915-54
URL: www.3s.co.at

(Competence Area 1)
Assessment, diagnosis, care plan

Sub-areas of competence	Steps of competence development			
1.1 Data gathering	1.1.a The caregiver is able to assist in conducting the nursing care assessment and completing anamnesis.	1.1.b The caregiver is able to conduct in-depth nursing care assessment under supervision.	1.1.c The caregiver is able to conduct in-depth nursing assessment independently.	1.1.d The caregiver is able to guide the complete nursing assessment.
1.2 Recognising the patient's/ client's ressources and defining the nursing care diagnosis	1.2.a The caregiver is able to assist in developing the nursing care diagnosis with regard of perception and observation of ressources and problems within nursing care.	1.2.b The caregiver is able to make/reconsider the nursing diagnosis with regard of perception and observation of ressources and problems within nursing care and knows how to document it under supervision.	1.2.c The caregiver is able to make/reconsider the nursing care diagnosis with regard of perception and observation of ressources and problems within the nursing care and knows how to document it .	1.2.d The caregiver is able to guide the development of the nursing care diagnosis.
1.3. Defining the nursing care aims and nursing care plan	1.3.a The caregiver is able to implement the nursing care plan according to nursing assessment results and document conditional changes.	1.3.b The caregiver is able to develop/adapt and implement the nursing care plan on the basis of the results of the nursing care assessment under supervision.	1.3.c The caregiver is able to develop/adapt and implement the nursing care plan on the basis of the results of the nursing care assessment.	1.2.d The caregiver is able to guide in the development of the nursing care plan.

(Competence Area 2)
Nursing Care

Sub-areas of competence	Steps of competence development			
2.1 Basic care/ personal hygiene	2.1.a The caregiver is able to support and perform basic care.	2.1.b The caregiver is able to provide basic care including resource-oriented support under supervision.	2.1.c The caregiver is able to provide basic care including resource-oriented support.	2.1.c The caregiver is able to guide and instruct others in developing a resource oriented basic care plan.
2.2 Nutrition	2.2.a The caregiver is able to order and distribute meals according to nutrition plans considering the individual condition of patients/clients who are not restricted with regard to nutrition.	2.2.b The caregiver is able to _prepare/adapt a nutrition plan under supervision according to patients'/clients' individual conditions and restrictions. _handle enteral nutrition and to place/handle feeding tubes under supervision.	2.2.c The caregiver is able to _prepare/adapt a nutrition plan under supervision according to patients'/clients' individual conditions and restrictions _handle enteral nutrition and to place /handle feeding tubes.	2.2.d The caregiver is able to guide and supervise the handling of enteral nutrition and placing/handling of feeding tubes.
2.3 Mobilisation and rehabilitation	2.3.a The caregiver is able to carry out mobilisation/ rehabilitation measures under supervision including patient/client activation according to the treatment plan and the patient's/client's individual condition .	2.3.b The caregiver is able to carry out mobilisation/ rehabilitation measures including patient/client activation according to the treatment plan and the individual condition.	2.3.c The caregiver is able to use special concepts and rehabilitation measures according to the treatment plan and the individual condition of the patient/client.	2.3.d The caregiver is able to guide and supervise others in using special concepts and rehabilitation measures.

(Competence Area 3)
Nursing intervention

Sub-areas of competence	Steps of competence development				
3.1 Participating in medical diagnosis	3.1.a The caregiver is able to assist _in the preparation of patients/clients for examinations and diagnostic tests _in the preparation of medical devices and materials for medical/laboratory examinations _in collecting patients'/clients' biological specimens for examinations.	3.1.b The caregiver is able to _prepare patients/clients and apply materials for diagnostic tests _prepare medical devices and materials for medical/laboratory examinations _collect patient's/client's biological specimens for examination.	3.1.c The caregiver is able to guide others in preparing patients/clients, applying materials for diagnostic testing and collecting patients'/clients' biological specimens for examination.		
3.2 Preparing and administering medication	3.2.a The caregiver is able to assist in preparing and administering medication according to medical prescription.	3.2.b The caregiver is able to prepare and administer medication according to medical prescription under supervision.	3.2.c The caregiver is able to prepare and administer medication according to medical prescription.	3.2.d The caregiver is able to guide the preparation and administration/application of medication according to medical prescription.	
3.3 Wound management	3.3.a The caregiver is able to assist in assessing and applying dressings and in evaluating wounds and stomas.	3.3.b The caregiver is able to apply and change wound dressings under supervision.	3.3.c The caregiver is able to perform all kinds of wound care.	3.3.d. The caregiver is able to guide in performing all kinds of wound care.	3.3.e The caregiver is able to contribute to research measures regarding wound care.

Sub-areas of competence	**Steps of competence development**			
3.4 Managing medical devices	3.4.a The caregiver is able to assist in placing and/or managing medical devices for medical applications according to medical treatment plan.	3.4.b The caregiver is able to insert and maintain medical applications according to medical treatment plan under supervision.	3.4.cThe caregiver is able to insert and care for medical applications according to medical treatment plan.	3.4.d The caregiver is able to guide others in the placement and care for medical applications according to medical treatment plan.
3.6 Basic and advanced life support – BLS/ALS	3.6.a The caregiver is able to provide BLS in an emergency case according to resuscitation guidelines.	3.6.b The caregiver is able to apply ALS according to resuscitation guidelines under supervision.	3.6.c The caregiver is able to apply ALS according to resuscitation guidelines.	3.6.d The caregiver is able to train others in providing first aid (BLS and ALS) according to resuscitation guidelines.

(Competence Area 4)
Creating & maintaining a health-promoting and safe environment

Sub-areas of competence	Steps of competence development			
4.1 Ensuring hygenical conditions and preventing nosocomial infections	4.1.a The caregiver is able to apply relevant (legal and employer specific) procedures and guidelines regarding asepsis, sterility, physical safety, hygiene as well as handling of medical equipment and contaminated waste.	4.1.b The caregiver is able to _contribute to evaluating, developing and revising procedures and guidelines regarding asepsis, sterility, physical safety, hygiene, the handling of medical equipment and contaminated waste. _monitor the compliance with procedures/guidelines of hygienical standards.	4.1.d The caregiver is able to contribute to research regarding hygienical standards and guidelines.	
4.2 Promoting a safe environment	4.2.a The caregiver is able to apply measures for a health-promoting and safe environment	4.2.b The caregiver is able to use assessment tools for the identification of existing and potential safety risks under supervision.	4.2.c The caregiver is able to use assessment tools for the identification of existing and potential safety risks.	4.2.d The caregiver is able to contribute to _the development of instruments of preventive measures/ assessment tools to identify existing/potential risks _risk and fault management
4.3 Promoting the emotional & physical health of caregivers	4.3.a The caregiver is able to _apply preventive measures against injurious health situations and conditions _react in injurious situations according to the clinical action plan.	4.3.b The caregiver is able to intervene and support colleagues to maintain their physical, cognitive, psychological and emotional health.	4.3.c The caregiver is able to contribute to the improvement of strategies and measures and to contribute to research on the maintenance of the physical, cognitive, psychological and emotional health of caregivers.	

(Competence Area 5)
Professional communication &collaboration with multidisciplinary team/ other healthcare professionals

Sub-areas of competence	Steps of competence development		
5.1 Train & manage peers in regular work activities	5.1.a The caregive is able to contribute to informing and monitoring new peers about daily working routines.	5.1.b The caregiver is able to _inform and monitor new peers regarding daily working routines, _make staff decisions in absence of the head nurse.	5.1.c The caregiver is able to _monitor tasks/activities regarding the daily working routines performed by new peers, _contribute to the development of new nursing care standards, instruction guidelines and protocols of new peers.
5.2 Professional communication	5.2.a The caregive has a basic understanding of different communication models and is able to use them in his/her daily work in the multidisciplinary team.	5.2.b. The caregiver is able to _communicate and network within the multidisciplinary team and with other healthcare professionals , _advocate for the patient/client.	5.2.c The caregiver is able to participate in developing, implementing and evaluating mechanisms for optimising the processes of professional interdisciplinary/ multidisciplinary collaboration.

(Competence Area 6)
Communication & collaboration with patient/client and relevant others

Sub-areas of competence	Steps of competence development			
6.1 Communication with patients/ clients/relevant others	6.1.a The caregiver is able to build, maintain and end verbal and non-verbal communication through empathy and appreciation.		6.1.b The caregiver is able to _assess the patients'/clients' cognitive potential, emotional responses and behavioural strategies using professional techniques/tools. _use professional communication models/tools.	
6.2 Education & empowerment of patients/ clients/relevant others	6.2.a The caregiver is able to explain basic medical information to the patient/client and relevant others.	6.2.b The caregiver is able to contribute or assist in informing, training and counselling patients/ clients/relevant others.	6.2.c The caregiver is able to _identify learning needs of patients/clients/relevant others. _inform, guide and empower patients/clients/ relevant others.	6.2.d The caregiver is able to use professional methods of interpersonal communication in challenging sitatuions.
6.3 Health promotion & prevention	6.3.a The caregiver is aware of impacts on health promotion and prevention and is able to provide, motivate and support preventive measures in the care process.	6.3.b The caregiver is able to _implement care processes facilitating health promotion/ prevention and the independency of the patient/client _coordinate the collaboration with/within the mutlidisciplinary team in order to motivate/ support the patient's/client's health promotion and health prevention activities.	6.3.c The caregiver is able to contribute in the devleopment and the implementation of health promotion/prevention within the health system.	

(Compentence Area 7)
Management

Sub-areas of competence	**Steps of competence development**

Not specified in the course of the HCEU project!

(Cross-cutting Competence Area A)
Monitoring, documenting, evaluating the care process & quality assurance

Sub-areas of competence	Steps of competence development					
A.1. Monitoring	A.1.a The caregiver is able to assist in observing and monitoring relevant information on the patient/client with noninvasive measures and to include it in the care plan.	A.1.b The caregier is able to observe and monitor relevant information on the patient/client with noninvasive and invasive measures and to include it in the care plan.	A.1.c The caregiver is able to supervise and monitor the care process including monitoring, documenting and evaluating the care plan.			
A.2 Documentation	A.2.a The caregiver is able to report and assist in documenting in the patient's/ client's condition/ behavior.	A.2.b The caregiver is able to document the patient's/client's condition/bahaviour.	A.2.c The caregiver is able to supervise the monitoring and documentation process.			
A.3 Evaluation	A.3.a The caregiver is able to recognise changes in the patient's/ client's condition/ behavior and to initiate appropriate reporting.	A.3.b The caregiver is able to identify (relevant) changes of patient's/client's condition/ behaviour and to adjust the care plan under supervision.	A.3.c The caregiver is able to evaluate the results of the observation and monitoring process and is able to optimise/ adjust the care plan.	A.3.d The caregiver is able to supervise and monitor the care and evaluate the care plan.		
A.4 Promoting quality assurance measures	A.4.a The caregiver is able to apply care standards.	A.4.b The Caregiver is able to identify situations that require additional information on quality assurance measures and act accordingly.	A.4.c The caregiver is able to identify relevant (new/revised) standards and guidelines.	A.4.d The caregiver is able to apply the quality management system.	A.4.e The caregiver is able to evaluate the quality and topicality of nursing care and identifies necessary steps.	A.4.f The caregiver is able to participate in multidisciplinary activities for the improvement of the quality of care provided and to participate in quality reports and the development of quality-promoting measures.

(Cross-cutting Competence Area B)
Ethical , intercultural & legal competence

Sub-areas of competence	Steps of competence development			
B.1 Ethical competence	B.1.a The caregiver is able to practically apply the basic concepts of nursing ethics and ethical theories in care	B.1.b The caregiver recognizes ethical challenges in care and is able to integrate them in the professional action.	B.1.c The caregiver knows ways of ethical decision-making and the different ethical requirements of care, health care and medicine.	B.1.d The caregiver is able to critically reflect ethical standards under consideration of changing circumstances and can contribute to setting/ revising ethical standards within nursing.
B.2 Legal Framework	B.2.a The caregiver is able to apply fundamentals of the respective health system and the relevant constitutional principles, legal frameworks and organisational guidelines.		B.2.b The caregiver recognises the structure of the respective health system and of constitutional principles, and establishes professional activities in accordance with the relevant legal frameworks and organisational guidelines.	
B3 Intercultural competence	B.3.a The caregiver is aware of differences between cultures and their influence on nursing tasks and is able to recognise potential needs or challenges of patients/clients resulting from cultural differences.	B.3.b The caregiver is able to adapt his/her work in such a way that a client's individual values, cultural and religious beliefs and needs are respected within the care process.	B.3.c The caregiver is able to intermediate in case of intercultural challenges and guide peers and clients through intercultural conflict situations.	

(Cross-cutting Competence Area C)
Continuous professional development and lifelong learning including self-reflection

Sub-areas of competence	Steps of competence development			
C.1 Identifying and addressing professional training needs	C.1.a The caregiver is able to critically self-reflect own competences and to identify training needs resulting from general requirements on caregivers.	C.1.b The caregiver is able to assess his/her personal working environment regarding changes within competence requirements and to initiate appropriate training measures for him/herself.	C.1.d The caregiver is able to reflect the own professional development with regard to further professional development steps and initiate appropriate training measures.	C.1.e The caregiver is able to identify training needs of colleagues and support them in their professional development.
C.2 Professionalisation of nursing	C.2a The caregiver is able to position nursing within health care is able to differentiate nursing from other health care professions.	C.2.b The caregiver is able to critically reflect the own profession and its positioning within health care and in society.	C.2.c The caregiver is able to recognise developments within the health care system and impacts on nursing professions.	C.2.d The caregiver is able to conduct research on the professionalisation of nursing.
C.3 Nursing research	C.3.a The caregiver is able to read and understand research results.	C.2.b The caregiver is able to interpret and evaluate research findings critically and to integrate relevant findings in the daily practice.	C.2.c The caregiver is able to _support others in research projects and _to participate in empircal research in the field of nursing science.	