

# Is Competence A Holy Grail for Teaching? Reflections on Nursing Education

## Abstract

The competence-based approach is largely widespread in the nursing schools and is viewed as a golden standard for professional teaching. But the practical use of the concept is varying among institutions and even teachers. The goal of this narrative review is to clarify the conception of competence and its use in the fields of education and nursing. Regarding education, Gonczi, Tardif, Jonnaert and Beckers are the key authors referred to. A first apparent consensus over the holistic nature of the competence quickly gives place to the observation of important nuances in conceptions. Similarly, in the field of nursing, Benner is first discussed, and recent literature reviews and concept analyses are taken into account: similar nuances are detected, as well as difficulties in the practical implementation of the concept. Considering the lack of consensus and the paradigmatic incoherences detected among the sources consulted for this review, we question the use of competence as single point of view for teaching and assessing, and we propose other avenues to be explored in order to recognize emergent professionalism.

**Keywords:** Competence; Nursing education; Emergent professionalism

## Review Article

Volume 1 Issue 4 - 2016

**Jacinthe Dancot\***

*Université de Liège, Belgium*

**\*Corresponding author:** Jacinthe Dancot, Nurse, Université de Liège, Belgium, Tel: + 32 61 230 488; Email: [jacinthe.dancot@ulg.ac.be](mailto:jacinthe.dancot@ulg.ac.be)

**Received:** November 07, 2016 | **Published:** December 30, 2016

## Introduction

The competence-based approach is largely widespread in the nursing schools and is viewed as a golden standard for professional teaching. But do we really know what we are doing when we use this approach, and are we really doing what we think we do?

Regarding its polysemic nature, we think important to define the concept of competence by a narrative review in two fields: education (with the integration of Anglo-Saxon and French speaking authors, whose views sometimes differ) and nursing. Then, we propose a reflection on the limitations of the competence-based approach as a single point of view in nursing education.

### The Competence in the field of education

Current authors in the field of education share a holistic view, but some nuances arise in their descriptions of competence or competence development.

Gonczi [1] highly contributed to the clarification and conceptualization, when defining the competence-based approach in vocational education in Australia. He noticed the existence of several different visions and recommended an integrative model.

In this model, competence is issued from the possession of a set of attributes (knowledge, values, know-hows, attitude) used in various combinations to lead professional tasks. In other words, the competent person has the attributes required to perform in a work (professional tasks more or less complex and specialized) according to the standards of the profession.

A fundamental characteristic of this model is the attributes-

task combination built in the competence. By comparison, the behaviourist model focuses on task and performance, while the generic one focuses on attributes and abilities of the individual. The integrative model is thus a holistic model, because it considers a lot of explanatory factors for a professional performance: the combination attributes-task, their application in global and complex real professional situations, and the inclusion of ethics and value in the decision-making process.

Another important characteristic of competence in the integrative model is its normative nature. Each judgement taken by a competent professional contributes to clarify what must be a competent behaviour in the same profession. The notion of competence is thus evaluative and bidirectional (from the profession to the practitioner and from the practitioner to the profession) and does not consist in a set of predefined prescribed behaviours (like it is seen in the behavioural approach).

These characteristics have one important consequence: there is always more than one way to be competent in a situation. The practitioner must consider the context, the local as well as the profession's culture, and have a reflexive practice.

This conception leads Gonczi [1] to focus on the competences development. A first way to develop competences is an informal learning during action in situation. He thinks this applies only to general competences, which do not need specific instructions. For sharper competences, it is necessary to develop a practical thinking oriented to parsimonious, flexible solutions.

Experience is not a sufficient condition for the development of the competence. Interactions with more experienced people are also needed: the learner experiments real problems and tests his practical thinking in front of experts and gains propositional

knowledge. The learning is situated in a context or a specific culture, with no distinction between knowledge, know-how and other resources.

In conclusion, Gonczi [1] makes no real difference between competence and expertise: he describes the competence as the capacity to act as an expert. He refers globally to a qualitative practice, and does not formulate lists of competences related to a profession. He drifts in this matter apart from Benner [2] who places the competence in the middle of a continuum from

noviciate to expertise, and from Tardif [3] and Roegiers [4] who use competence referentials.

A few years later, Tardif [3] describes more specifically the various types of resources to be mobilized and combined in situation. He develops the idea of an integrated and functional network of cognitive, affective, social, sensory-motor components, habitus, schemes constructed via experience, and external resources. The competence is an endless renewed amalgam of these components, in function of the encountered situation.

'The competence is a complex 'know-to-act', based on the effective mobilization and combination of various internal and external resources inside a family of situations' (Tardif, free translation [3]).

Tardif [3] distinguishes the competence (know-to-act) from more algorithmic and automatable know-hows, in which he does not make any difference. While these know-how can be trained in a decontextualized way, the competence itself is situated and as it can only be exerted in situation.

Tardif [3] recognizes the benefits of competence referentials, and analyses the referentials regarding his definition of competence: distinction between know-to-act and know-how, and integrative, combinatory, developmental, contextual and evaluative aspects. He invites to use these referentials with several stages to be progressively reached during or at the end of the education. This concept of level of competence drifts away

from Gonczi's representation of competence such as expertise. The minimal level to be reached is the level estimated as allowing an autonomous, reflective and ethical practice.

This vision is a more operationalizable way to conceptualize competence in a context of learning. It introduces the notion of assessment: each competence of the referential must be assessed during the education. Tardif [3] proposes to describe learning cognitive models for each competence and to assess it by a dynamic vision of the progression of the learner.

The use of competences referentials leads to the notion of curriculum. Jonnaert [5,6] places the competence-based approach in the socio constructivist paradigm.

'Through a competence, a subject mobilizes, selects and coordinate a series of resources (including his/her knowledge but also other resources of affective and social nature and resources related to the situation and its constraints) in order to treat a situation effectively. A competence supposes, beyond the effective treatment, that this subject puts a critical regard to ensure that the outcomes of this treatment are socially acceptable.' (Jonnaert, free translation [5])

Considering the constructivist dimension of this paradigm, he gives a particular importance to the individual's representation of the situation, which will trigger his reaction. He focuses a reflexive process before and during action, whereas Gonczi [1] insists on the reflexivity after the action. Schön [7] had englobed the reflexion before, during and after the action in his description of the reflexive practice, so Gonczi and Jonnaert may here be considered as complementary rather than opposed.

Jonnaert [5] proposes architecture of the competence in four levels: competence, capacity, skill and disciplinary content. The skill is close to Tardif's description of know-how. The capacity is closer to Tardif's scheme constituted in action. The disciplinary contents, the skills and the capacity belong to the cognitive domain, whereas the competence is situated and is composed of other dimensions (among others, affective). They are resources for competence, and they acquire their meaning in situation, in a network with other resources. In conclusion, if this architecture can be described a priori and used to conceive curricula, the competence itself cannot be defined before the situation: it is named when this network allows to reach a satisfying outcome.

What is shared by these authors and numerous others is of course the holistic view and the need to consider not only the acquisition of resources, but overall the mobilization of these resources in situation, leading to the efficient resolution of the problem. But some fundamental differences can be highlighted in the conception of curricula (the competence in general, viewed as expertise, or a set of competences described in a referential) and in the assessment of the competence. Tardif [3] proposes to consider above all the development process; Gonczi [1] focuses on the result, with a part of normative (thus predictive) aspect; and Jonnaert [5] relies also on the result of the action, but rejects a predictive possibility, regarding the form of the result as well as the competence of the student (that could be non-reproductive in another situation).

These differences are questioning our curricula and assessment models: according to our conception of competence, we must use it or not (if it is not predictable) to conceive the curriculum and we must adapt our evaluative process. But are we all clear with these nuances and with the position we share? And is one of them to be privileged when considering curriculum and assessment?

Roegiers [4,8] proposes a practical way to conceive curricula in a competence-based approach, on the basis of a description of the professional activity. He introduces the professional activity in his definition of the competence and proposes the redaction of a referential of two or three competences: he differs here from Gonczi [1] who proposes only the competence, and from Tardif [3], who recognizes the possibility of more numerous

competences in a referential. He insists on the necessity of a formulation of the competence that be neither too concrete (it must reflect the complexity of a key activity of the profession) nor too general (because it would not be operational) at the same time, and that includes a complex task, a family of situations and some assessment criteria.

'A Competence is a combination of knowledge, know-how, know-how-to-be, which can be mobilized at any moment to face an emblematic situation of the professional activity'  
(Roegiers, free translation [4]).

Roegiers et al. [8] propose the formulation of a limited number of competences as the level to be achieved at the end of the professional education, and a larger number of middle range statements to describe the level to be reached at every step of the education. Even if situated in a holistic view, we see here another way to conceive the competence and its use in education.

The architecture of the resources differs also from that proposed by Jonnaert [5] and presented above. Roegiers [4] describes knowledge, know-hows and capacities. Knowledge may be learned knowledge as well as more specific and contextualized experience knowledge. Know-hows are part of several categories, depending on their domain (cognitive, social and affective), their specificity (vocational or transversal) and their complexity (from the more general to the more specialized). He acknowledges the existence of experience know-how. Capacities are more transversal and colour the implementation of know-how in situation, giving them their professional nature. They can be of methodological,

organizational or psychosocial nature; they develop along life and it is difficult to assess them. By comparison, competences are acquired and can be assessed at the end of educational process (Roegiers [4] drifts apart from Jonnaert [5] and Tardif [3] who do not position the end of professional education as the end of competence development).

Roegiers' conception of capacity [4] joins that of Leclercq [9] discussing transversal competences for more than one family of situations.

Limited links are drawn by these authors between competence development and professional identity. Beckers [10] assumes that the person transformation supposed by professional competences development is accompanied by a deep transformation of the person as a human being.

Her definition of competence is very close to those proposed here above.

'A competence is the capacity to act effectively, through mobilizing spontaneously, correctly and in an organized way [...] internal [...] and external [...] resources in a complex and somewhat new situation, belonging to a family of situations which are open (several possible solutions) and critical (essential to social, professional or citizen life)'  
(Beckers, Leclercq et Poumay, quoted by Beckers, free translation [10])

Like all previously mentioned authors but Gonczi, Beckers [10] considers several competences developed during a professional education. She proposes a very progressive acquisition of resources and the devotion of enough time to elaborate and structure a rich, diversified and organized network of knowledge. She operationalizes the notion of competence step. She also insists on the social nature of the knowledge construction and links, like Gonczi [1], the professional action and the contact with a more experimented professional, guarantor of reference practices.

This sharing on practices, attitudes and representations impacts the construction of a professional identity. The issue is not only the competences development, but also the development of attitudes according to a value system to be constructed by the learner and complying with the socially recognized values of the profession.

This overview of authors recognised in the education field and sharing a holistic point of view highlights some irreconcilable nuances. So it could be instructive to explore the nursing field in

order to see if the concept of competence has a more consensual understanding.

### The competence in the field of nursing

A first important and well-known author in the field of nursing is of course Patricia Benner [2]. Based on Dreyfus' model of competence acquisition, she describes steps of competence development of nurses: novice, beginner, competent, performer and expert. These steps translate three types of change: the use of abstract principles and then of a concrete experience, the perception of the situation as composed by separated elements and then as a whole, and the engagement in the situation as an external observer and then as an implicated actor.

Novices have no experience and refer to rigid rules; students can be considered as novices, as well as nurses integrating a new domain of practice. This status of novice is not related to one or another competence (like in the Dreyfus' model) but to a person, in his/her capacity to manage a clinical situation. Benner is thus

referring to a very global competence, which we shall name 'clinical competence'. Of course, placing the student at the very start of this continuum is opposed to developing a competence in initial education, as described by Tardif [3], Jonnaert [5] and Roegiers [4].

In the field of clinical practice, Benner identifies 31 competences, leading to a very complex referential, using the concept of competence at three levels: the 31 competences themselves, the global clinical competence, and the tier reached in the continuum. On the basis of the previously mentioned authors, we should not name these 31 statements as competences, as they are too numerous and not complex enough.

The confrontation with a new type of pathology puts down the cursor back to zero: the nurse who was experimented in a setting and who changes of domain of practice becomes novice back. This notion of type of pathology is similar to the one of situations family used by Tardif (see above). Benner drifts apart from Gonczi [1] who recognizes a competence close to expertise and that cannot regress; from Roegiers [4] who recognizes only a few number of competences (here it could be a lot of different types of pathology); and from Jonnaert [5] and Tardif [3] who describe the development of competences linked to situations families (i.e. type of pathology or patient) simultaneously and with some transferable elements. As a shared point of view, Benner [2] insists on the importance of the experience and of an accompanied reflection with a more experimented professional.

Furthermore, Benner [2] drifts apart from the current vision of the centre of interest of the nursing discipline, which focuses on the person and not on the pathology [11]. So we shall pursue the reflexion with the chronological exploration of some literature reviews in the field of nursing, in order to evaluate to what extend the concept has been clarified.

A literature review [12] has been made on articles from 1995 to 2003 in order to formulate an operational definition of the concept of competence applied to nursing profession. It shows a lack of consensus, ambiguity and even contradictions in the diverse definitions of the concept.

This review presents, further to Benner's conception, two types of definitions: a behaviourist conception linked to an ability to realize a real task (which can be standardized), and a vision of psychological construct regarding cognitive, affective and psychomotor capacities. Another distinction in the literature is that competence can concern what people do (a performance) or what they know (intrinsic qualities underpinning a professional practice). Furthermore, the term 'competence' can be used in a positive vision, in opposition to incompetence; or in a potentially negative vision, as a mid-level in a continuum, to describe a practice that is not expert.

These variations in the definition and the use of the concept lead Cowan et al. [12] to plead for a holistic definition including all dimensions, norms, actions and intentions. Based on Gonczi [1], they include professional judgment, relational aspects, ethics and reflexive practice. This implies that there is more than one manner to be competent: this complicates the assessment process and minimizes the operational nature of the definition.

In conclusion, the vision of Cowan et al. [12] is close to Gonczi's

one [1], describing the competence as an expert professional practice. This definition, in addition to the assessment difficulties, makes its application in initial education difficult.

Charette [13] realized an evolutionary analysis of the concept of competence using Rodgers' method<sup>1</sup>, on the basis on a literature review from 2008 to 2013 in CINHAL data base. They intended to propose an operational definition of the concept allowing more coherence between the definition, the learning strategy and the assessment methods.

Charette et al. [13] identified some attributes allowing to recognize the statements corresponding or not to the concept of competence.

These attributes are:

- Activation of actions which lead to behaviors or reflections demonstrating a certain level of performance and mastering.
- Some systemic cognitive, psychomotor and affective abilities, expressed in a symbiotic way.
- Contextualization to a specific situation.
- Continual development thanks to initial education, professional practice (experience) and lifelong learning.

As a prerequisite to competence expression, they identified values, attitudes, and knowledge and learning situations. All these elements but situations correspond to internal resources cited by Tardif [3], Jonnaert [5] and Roegiers [4], but Charette et al. [13] do not mention some external resources like do Tardif [3] and Jonnaert [5]. Learning situations are authentic situations allowing the integration of learnings (as proposed by Roegiers [4]) and the automation of some resources (as mentioned by Beckers [10]).

Consequences of competence expression are public protection (security and quality of care), personal satisfaction of nurse (acquisition of professional autonomy) and intra- and interprofessional dialogue.

In a general way, Charette et al. [13] note variations in the use of the concept of competence, in particular between initial and continuous education, but with a consensus emerging for a holistic definition. They also note the concomitant development of assessment tools; unfortunately, these tools often decompose the action in serial tasks, which is incoherent with a holistic vision. This is a paradigmatic incompatibility: the assessment mechanism should reflect the attributes identified above for the concept of competence.

A curriculum based on the concept of competence and using it in objectives, learning strategy and assessment methods is named a competence-based approach. A recent literature review on the concept of "competence-based approach" in nursing with Wilson's method [14] demonstrates the same lack of clarity and consensus. A prerequisite for this approach is the formulation of the competences referential of the education; this approach represents then a pedagogical system carried out by an institution in order to train individuals to a professional practice.

<sup>1</sup> The Rodgers' evolutionary method for concept analysis aims to give a « real definition » (opposed to a dictionary definition) of a concept by understanding its pragmatic use in a context dependant way.

The competence-based approach is 'an educational system in which the curriculum is conceived on the basis of abilities, attitudes and values associated with the professional roles. The learner constructs and integrates his knowledge throughout authentic learning situations characterized by cognitive disarray leading to learning after the problem resolution. The teacher does not transmit the knowledge, but plays a tutor role. The knowledge is considered as a process in accordance with the constructivist paradigm'. (Loosli, free translation [14])

Loosli [14] points out some difficulties in the operationalization of the competence-based approach. First, the status of knowledge, and in particular abstract knowledge, is unclear; some more manual topics seem to be more adapted to a competence-based approach. Second, the application of the competence-based approach is done by steps, and these steps lead teachers and learners back to behaviorism. Third, the assessment of know-to-be is difficult in the context of a competence-based approach. Fourth, there is a lack of guidelines to implement a competence-based approach in a harmonized way for a discipline, and in an ethical way considering individual differences between students regarding external resources, abilities, learning speed, etc.

The consequence is that, the unclear status of the concept of competence hinders the implementation of a competence-based approach, because the practical questions arising during implementation need answers and/or tools which currently do not exist.

In spite of a consensus over a global approach in the fields of education and nursing, competence remains a polysemic and far from being stabilized concept. It can consist in a global judgment over a person (evaluated as competent or not, or situated on a continuum) or in some characteristics of a practical domain (with standards to qualify a practice as competent - these standards being or not *a priori* defined).

When competence is viewed as a global judgment over a person, it can mean an ideal to be reached (expertise), a know-to-act in continual development or a step of development.

When competence is viewed as a characteristic of a practical domain, formulated in a competences referential, this formulation can be very encompassing (by example the clinical competence as could describe it Roegiers [4]) or complex when limited in scope (by example the clinical reasoning, as described by Goudreau et al. [15]).

This lack of consensus and, maybe, of comprehension of the concept by the actors, leads to paradigmatic incoherencies between the holistic conception of competence and the methods of teaching or assessing. This is highly questioning considering the status of competence as golden standard for professional education. The last part of this article will focus on a critical discussion of this practice.

### Critical discussion

This literature review enables us to have a critical discussion of the use of competence as unique point of view in nursing education. What could explain that a concept which remains so unsterilized is so widely used without precise understanding of its

scope? A possible explanation is that the concept of competence is issued from the world of enterprise, and answers to its logic, which is one of efficiency, profitability and competitiveness [16]. The dominant paradigm there is behaviorism, and the concept of competence, used in the education, must thus overcome the fundamental antinomy between behaviorism and constructivism, and grieves progressing from one to other in practice. Teachers are placed in front of paradoxical requirements: to let the learner construct his own learning, his own competences not predefined and, in the same time, to induce him to develop knowledge, know-how and know-how-to-be already established by professionals and pedagogical managers.

These paradoxical requirements are also experienced by students, particularly at assessment time, when they must simultaneously find their own way and fit into the program of professionalization, in other words show their suitability to the job market. The assessment focuses then on requirements of the registered professional, with some real damages in terms of self-esteem and self-confidence [17]. The concept of competence, in its current use, seems unable to detect the emergent professionalism [18], i.e. the progress in acquiring knowledge, attitudes and values which, at one point in time, will allow to be a real professional.

Furthermore, nursing touches emotions, affect and development of an ability to engage oneself as a subjective human being in relation with a suffering person. Linking competence and performance, in practice if not in intent, promotes mechanical, normalized education process, and provides limited input on complexity, subjectivity and relational [19,20] or ethical [21] abilities.

### Conclusion

This literature review leaves us with some unanswered theoretical questions related to the comprehension of the concept of competence and its implementation in initial education in nursing.

Is the competence normative? If yes, although the attractiveness of a global vision of a competent individual, it is difficult for teachers to deliver on its basis a diploma by nature built on social and professional norms. If no, teachers lack criteria on which to decide the satisfying character of an action and, above all, to guide students to the result to be reached. Furthermore, describing competences in referentials seems by essence normative and restrictive. The absence of clear and shared guidelines for these issues allows us to question the use of the concept of competence in initial professional education.

Are we speaking about an individual globally competent,

or about the development or the 'possession' of a set of competences? If competences are evaluative and can also be 'lost', it makes difficult for teachers to ensure that an individual will pursue the treatment of situations in an acceptable way for patients, employer and society. And, moreover, competence in its holistic conception, which gets close to expertise, seems to target very high: it does not recognize emergent professionalism, individual evolution, development of the ability to progress. These unresolved difficulties question the use of competences as principal criteria for assessment.

In conclusion, if competences, in their most holistic vision, are an interesting tool to describe the professional action (praxeological dimension), they cannot alone orientate the pedagogical practice, be it through objectives, learning mechanisms or assessment methods. Teachers and, more widely, education institutes, should identify, clarify and share their conception of competence and the use they make of it, and enrich it with other mechanisms touching the evolution of professional identity (identitarian dimension), the construction of a system of values (axiological dimension), the caring posture, the know-how-to-be, etc.

Numerous tools are already existing, such as portfolio or reflexive analysis of practice; but their use should be re-thought and should foresee that students be closely accompanied for maximum benefit. Other tools can also be developed, among others the identification of clues allowing recognizing, independently of the performance, the emergent professionalism of nursing students.

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