MULTIPLE INTELLIGENCES,
A THEORY THAT CAN BE APPLIED TO NURSING

By Margot Phaneuf

For some time we have been hearing about a theory that has radically changed our understanding of human intelligence and how to measure it. Traditional I.Q. tests, as developed many years ago by Binet and Simon, deal mainly with the ability to solve logical and mathematical problems, oral expression and the speed at which different types of data can be processed. As such, they only measure some very limited aspects of intelligence. Following work by Howard Gardner, an American cognitive psychologist and “developmentalist” who teaches education at Harvard University, it is now generally accepted that human intelligence is much more complex, and that it conceals forms of intelligence of which we make little use in nursing.

In fact, most people have all the forms of intelligence described by Gardner, if only to different degrees. Each person demonstrates distinctive personal traits, using each of these forms of intelligence but in their own personal combination. This explains why many students are unable to draw on the forms of intelligence needed for the types of teaching that we offer. Students cannot meet requirements that are not adapted to their intellectual capacities, because too often we use forms of teaching that rely on theory and deduction, where abstraction is critical to success. As a result, these students develop negative images of themselves and are never able to attain their full potential. As can be

**Different Forms of Intelligence**

- **Linguistic**
- **Existential**
- **Logical mathematical**
- **Naturalist**
- **Intrapersonal**
- **Musical**
- **Interpersonal**
- **Bodily kinetic**
- **Spatial**

*From Howard Gardner*
seen in the previous drawing, Gardner has identified several different forms of intelligence. They are:

**Linguistic verbal intelligence**, which is used in verbal and written communication and in reading. We use linguistic verbal intelligence to articulate thinking and develop opinions. This form of intelligence is useful to communicators, journalists and salespersons. We also use it to teach nursing and when we teach clients. Traditional training methods focus on this form of intelligence by having students write, but they do not put enough emphasis on its verbal aspects, which are so important in nursing. Warm and functional communication is nevertheless a key part of nursing and an essential part of the therapeutic relationship.

**Logical mathematical intelligence** governs our ability to measure, calculate, solve problems and use computers. This is the intelligence used by science and mathematics scholars as well as accountants. In nursing, we call upon our logical mathematical intelligence to solve complex problems, develop plans of care, assess quality of care, create various types of schedules, take pharmacological measurements and understand the science behind contributing disciplines such as biology, physics and chemistry.

**Intrapersonal intelligence** gives us the capacity to think about who we are, to know ourselves, to have a personal identity. It helps us reflect on things and leads to introspection, meditation, questioning and spirituality. Intrapersonal intelligence allows us to exercise a precious skill in education and nursing: metacognition, which makes it possible to reconsider our actions, evaluate their relevance and make any needed corrections. It is often seen in people who are individualistic and independent.

**Interpersonal intelligence** makes it possible to think like another person, to understand what they are going through, to perceive their needs and make ours understood, to share our ideas, to cooperate with others and to help and take care of others. Interpersonal intelligence is important in nursing, since us to listen to a patient, work in a team with other professionals, work with families in conflict resolution, organize activities, and exercise leadership and managerial responsibility at different levels.
Spatial intelligence is based on visual perception and features a strong sense of imagination. It gives us an aptitude for creating mental images and perceiving images outside ourselves, for thinking about and recreating the visible world. Spatial intelligence is essential to the visual arts, wayfinding and creativity of all kinds. It is the dominant type of intelligence seen in artists and in many people who use their hands to create useful or beautiful things and representations in space. Spatial intelligence is strong in architects, engineers, advertising executives, film directors, etc. In nursing, this type of intelligence is not wasted; it is used to create a harmonious and pleasant environment for a patient. Spatial intelligence is also important for the creative use of care procedures.

Kinetic intelligence is the intelligence of the body. It helps us control our movement, which is the basis of general and fine motivity: our ability to manipulate objects. Kinetic intelligence makes it possible to feel and think about sensations in our bodies and to align thought with movement in dance, sport and techniques. It is the type of intelligence found in athletes, craftspeople and engineers. In nursing, we use kinetic intelligence to think about our actions when providing care and to measure our strength when we try to work with greater dexterity.

Musical intelligence is used to perceive and appreciate sounds, to feel rhythms and melodies, to pay attention to overall harmony and to stay in time with sounds and movements. In nursing, musical intelligence is used when we soften and modulate our voices according to the type of care we are giving and according to the psychological circumstances of a care situation.

Naturalist intelligence is the last intelligence that Gardner defined. As you might expect, it gives us access to the values and sensations found in nature and to knowledge about flora, fauna and the earth sciences in general. Naturalist intelligence also helps us develop our ability to organize, select, categorize, create lists, collect, garden, decorate and conduct scientific research. In nursing, we use naturalist intelligence to help a patient come back to basics, to move towards a healthier lifestyle and better eating choices, and to learn to relax and seek personal fulfilment.

Existential intelligence is a form of intelligence that Gardner is currently working on and may add to his theory. This, the ninth form of intelligence, is more comprehensive and deals with the meaning of life. Existential intelligence draws on several other forms of intelligence, so that the individual can combine multiple abilities and make them work
together synergistically. The author believes that existential intelligence controls the other forms of intelligence and may even give them ethical and metacognitive meaning. Research into this last form of intelligence is ongoing.

In his program *Par Quatre Chemins*, Jacques Languirand said that “the theory of multiple intelligences draws on all human aptitudes, so it can be applied to all trades and professions. By placing everyone on an equal footing, it enables each and every one of us to come out a winner.” We would be well advised to adopt this goal in education, since the teaching strategies we implement can foster development of these different forms of intelligence. This would require a dynamic approach to teaching, one that features more diversity, that is specifically adapted to the various forms of intelligence, and that focuses on cooperation.

Our provincial program of nursing care, based on competencies, meets this diversity criterion. Since a competency needs to be situated in an action in order to apply, the nurse must understand her role in the action by accumulating knowledge, attitudes, values, behaviours and commitments. As we have seen, intelligence does not only imply having learned the theoretical or technical aspects of care, it also requires learning how to listen, think, feel, make decisions, and act appropriately and skilfully.

**Bibliography**


[http://www.infed.org/thinkers/gardner.htm](http://www.infed.org/thinkers/gardner.htm)