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Beyond expertise: theory, practice and the reflexive practitioner

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Summary

• This paper reconsiders Benner's book *From Novice to Expert*, in which the expert is portrayed as a reflective practitioner who works intuitively, drawing almost unconsciously on a repertoire of context-specific paradigm cases.

• In the light of more recent writings on informal, practice-based theory, it is suggested that there is a sixth level beyond expertise which is characterized by mindful practice and informal theory building. At this level, the practitioner constructs informal theory out of practice, applies that theory back into practice, and reflexively modifies the theory as a result of the changed clinical situation.

• Seen in this way, theory and practice are two parts of the same process, and the theory–practice gap is closed.

Keywords: expert practice, informal theory, reflection, reflexive practitioner, theory–practice gap.

Reflection-on-action and the expert nurse

It is now 12 years since Patricia Benner published her highly influential book *From Novice to Expert* (Benner, 1984). It is a book which made an enormous impact on nursing, but which at the same time limited the scope of what nursing could become by suggesting that the level of expert was the pinnacle to which nurses should aspire. This was hardly the fault of Benner, who was attempting to codify and make sense of the state of nursing in the early 1980s, but in the light of later developments in our understanding of theory and practice and the relationship between them, it is time that we reconsidered the notion and status of expertise.

Benner suggested five levels of practice, from the novice or beginner who nurses 'by the book', following non-contextualized rule-governed procedures, to the expert, who:

> with an enormous background of experience, now has an intuitive grasp of each situation and zeroes in on the accurate region of the problem without wasteful consideration of a large range of unfruitful, alternative diagnoses and solutions. (Benner, 1984)

Nurses are able to achieve this by drawing on 'past paradigm cases', that is, their experience of similar situations which have proved successful in the past. Benner argued that each expert nurse has his/her own situational repertoire of paradigm cases which is unique to him/her, and which constitutes a body of personal knowledge which is very different from public, academic knowledge.

Benner, following the philosopher Gilbert Ryle (1963), referred to this knowledge as 'know-how', and distinguished between knowing *how* to do something, for example, the personal, contextual, practical knowledge of how to respond to a particular patient following a bereavement; and knowing *that* something is the case, for example, the public, generalizable, academic knowledge that bereavement often follows a particular course. Another philosopher, Bertrand Russell (1967) made a similar distinction between knowledge by acquaintance, that is, from first hand experience, and knowledge by description, that is, from books or lectures.

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It is possible to possess either one of these types of knowledge without the other. For example, I might have the academic knowledge, gleaned from textbooks or lectures, of a particular model of counselling, but not the practical knowledge of how to apply it. On the other hand, I might know how to counsel without having the academic knowledge to justify what I am doing. Ideally, though, I need both. The newly qualified novice might have academic knowledge without much know-how or personal, experiential knowledge, whereas the experienced nursing assistant might have plenty of know-how but no academic knowledge base. The expert, however, has a combination of knowing how and knowing that, and it is therefore the acquisition of know-how or personal, experiential knowledge that separates the novice from the expert.

Benner believed that it is possible, although not inevitable, that expertise can develop almost incidentally over time. However, she also pointed out that 'experience, as the word is used here, does not refer to the mere passage of time or longevity', and that 'there is a leap, a discontinuity, between the competent level and the proficient and expert levels' (Benner, 1984).

In fact, the word 'experience' is misleading when used in this context. Experience is usually thought of as passive, as what happens to us, whereas the kind of personal knowledge base of paradigm cases to which Benner was referring requires active work. This is reflected in Benner's definition of experience as 'the refinement of preconceived notions and theory through encounters with many actual practical situations that add nuances or shades of difference to theory' (Benner, 1984). In other words, experience needs to be processed if it is to be turned into personal knowledge, and one way of processing that experience is by reflecting on it.

Partly due to Benner's work, reflection is now widely accepted as an important part of the nurse's repertoire of skills, and has been defined as:

> the retrospective contemplation of practice undertaken in order to uncover the knowledge used in a particular situation, by analysing and interpreting the information recalled. The reflective practitioner may speculate how the situation might have been handled differently and what other knowledge would have been helpful. (Fitzgerald, 1994)

Donald Schön (1983) referred to this as reflection-on-action, and it is this process which turns experience into knowledge. It is largely irrelevant how much experience a nurse has; if she does not reflect and learn from that experience it will never help her to improve her practice. This is precisely what Benner meant when she said that experience is not dependent on time, and that there is a discontinuity between the lower and upper levels of nursing practice.

Much of the personal knowledge generated from reflection-on-action is what Polanyi (1962) called tacit knowledge; knowledge which cannot easily be put into words, or even knowledge which nurses are unaware that they possess. Benner referred to nursing actions based on personal, tacit knowledge as 'intuitive grasp', a process by which the nurse just seems to know the right thing to do in any given situation. However, intuition is not a magical process, but the unconscious workings of a prepared mind, and 'intuitive grasp should not be confused with mysticism since it is available only in situations where a deep background understanding of the situation exists' (Benner, 1984).

Expertise, then, is concerned with working intuitively, with responding to practice situations holistically from a body of personal, tacit knowledge, a repertoire of past paradigm cases, what has been called the art of nursing. Dreyfus and Dreyfus, on whose work Benner based much of her study, described this expertise in terms of the experienced performer, who:

> is no longer aware of features and rules, and his/her performance becomes fluid and flexible and highly proficient. The chess player develops a feel for the game; the language learner becomes fluent; the pilot stops feeling that he/she is flying the plane and simply feels that he/she is flying. (Dreyfus & Dreyfus, 1977)

This notion of 'getting the feel' for an activity, of being able to do it almost without thinking, will be familiar to all experienced car drivers or typists, and is referred to by psychologists as 'chunking'. Chunking is the process by which larger and larger units of behaviour or cognition come to be seen holistically as a single thought or action:

> To the novice, typing proceeds letter by letter; to the expert, the proper units are much larger, including familiar letter groupings, words and occasional phrases. Similarly, the beginning driver laboriously struggles to harmonize clutch, gas pedal, steering wheel, and brake, to the considerable terror of innocent bystanders. After a while, those movements come quite routinely and are subsumed under much higher (though perhaps equally dangerous) chunks of behaviour such as overtaking another car. (Gleitman, 1991)

Thus, 'much of the difference between master and apprentice is in the degree to which subcomponents of the activity have been chunked hierarchically' (Gleitman, 1991).

When applied to nursing, the chunks take the form of sets of procedures or groups of related past paradigm cases which the expert nurse calls on unconsciously, such that

'this multifaceted knowledge with its concrete referents cannot really be put into abstract principles or even explicit guidelines' (Benner, 1984).

The expert nurse is therefore a reflective practitioner who processes his/her experiences through reflection-on-action into personal knowledge and paradigm cases, and then smoothly and unconsciously translates that knowledge into practice, displaying an intuitive grasp of whatever situation he/she finds him/herself in.

Reflection-in-action and informal theory

Reflection-on-action is, however, not the only form of reflection; Schön also described a process which he called reflection-*in*-action, in which reflection takes place in the practice setting rather than retrospectively. In reflection-in-action, nurses use their personal knowledge to construct an informal theory about the situation they find themselves faced with, hypothesize about the possible outcomes of applying that theory, test out their hypotheses in practice, reflect on the changes that this produces, respond to those changes by modifying their theory, test their new hypotheses, and so on in a reflective cycle (Fig. 1). Furthermore, all of this happens in the practice setting so quickly and seamlessly as to become a single process. Reflection-in-action is therefore a form of problem-solving, which is why it was also referred to by Schön as on-the-spot experimenting.

Benner hinted at this process when she wrote: 'expertise develops when the clinician tests and refines propositions, hypotheses, and principle-based expectations in actual practice situations' (Benner, 1984). However, she did not fully recognize this aspect of the nurse's role, despite the fact that the problem-solving approach characteristic of reflection-in-action is evident in several of the paradigm cases recounted by Benner in her book. For example, she presents an account by an expert nurse who discovers a patient lying in a pool of blood:

> So I looked at the dressing and it was dry, the blood was coming out of his mouth. The man had a tracheotomy because of the type of surgery that had been done. He also had an NG tube for feedings, and I got to thinking that it might be the innominate or the carotid artery that had eroded. So we took him off the ventilator to see if anything was going to pump out of the trach. There was a little blood, but it looked mostly like it had come down from the pharynx into the lungs. So we began hand ventilating him, trying to figure out what the devil was inside his mouth that was pumping out this tremendous amount of blood... (Benner, 1984)

Benner noted the expertise with which the nurse handled the situation, but neglected to explore the way that she formulated and tested hypotheses in an attempt to solve the problem of where the blood was coming from. The nurse in this example was clearly engaged in reflection-in-action, although Schön's book The *Reflective Practitioner* would have been published too late for Benner to employ his terminology.

The significance of reflection-in-action is not just that it solves problems for practice, but that it does so through the construction of informal theories which are being constantly tested, modified, retested, and so on in a process of on-the-spot experimenting. In fact, this notion of informal theory, which refers to personal, individual theories about specific patients in specific situations, is arguably one of the most important concepts for nursing to emerge over the past 10 years, although it was first employed by educationalists (Usher & Bryant, 1989).

Furthermore, the relationship between informal theory and practice is rather different from that between formal, scientific theory and practice. Formal theory informs and dictates to practice, in the sense that a nurse using a particular counselling model will be following a particular template or process. Informal theory and practice are mutually dependent, however, and follow a circular process, with practice generating theory, theory modifying practice, which generates new theory and so on. The practice emerging from this process will be referred to as reflexive practice, as it not only generates new theory, but is itself reflexively modified by that theory.

Carr & Kemmis (1986) pointed out that informal theory is contained in practice by definition, because without it practice is merely random and uncoordinated activity, and informal theory is similarly by definition generated from practice. Informal theory and practice, then, are not only dependent on one another, but are inextricably linked, and

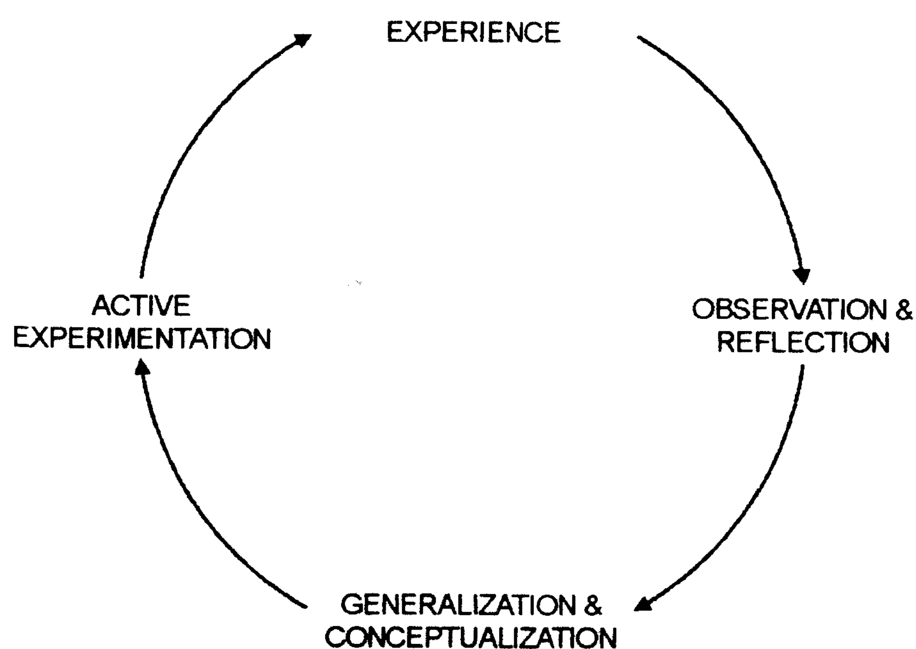

Figure 1.

this has a number of important implications for nursing, not least of which is the way in which the generation and application of informal theory abolishes the hierarchical relationship between theory and practice and between researchers and practitioners, and hence closes the theory-practice gap (Rolfe, 1993).

Beyond expertise: the reflexive practitioner

The expert or reflective practitioner makes practice seem so simple and effortless because he/she is functioning on autopilot, unconsciously drawing on his/her repertoire of paradigm cases. However, for the reflexive practitioner who is concerned with reflection-in-action, with on-the-spot experimenting and with the generation of informal theory and the testing of hypotheses in the practice situation, it is vitally important that he/she is acutely aware of the clinical situation he/she finds him/herself in, and this requires him/her to go beyond expertise as it is described here.

In fact, this sixth level of practice is almost the antithesis of expertise. The aim of an expert is to act intuitively and without conscious thought, almost at spinal cord level, and 'if experts are made to attend to the particulars... their performance actually deteriorates' (Benner, 1984). But there are equal dangers in not attending to particulars:

> as a practice becomes more repetitive and routine, and as knowing-in-practice becomes increasingly tacit and spontaneous, the practitioner may miss important opportunities to think about what he is doing. He may find that... he is drawn into patterns of error which he cannot correct. And if he learns, as often happens, to be selectively inattentive to phenomena that do not fit the categories of his knowing-in-action, then he may suffer from boredom or 'burn out' and afflict his clients with the consequences of his narrowness and rigidity. When this happens, the practitioner has 'over-learned' what he knows. (Schön, 1983)

The reflexive practitioner, in contrast, requires a particular sort of mindfulness which involves an intense concentration on the task at hand. Even with very simple tasks such as wound dressing, the difference is striking: the expert nurse would perform the required actions swiftly and deftly and without conscious thought, whereas the reflexive practitioner would think about every move, every decision, relating them to this patient in this situation.

More importantly, nurses would be learning from their performance, thinking about how it could be done differently, constructing theories, testing hypotheses, and modifying their actions in the here-and-now, and this requires mindful attention. Reflection-in-action therefore serves to focus the attention of nurses on the here-and-now and on the uniqueness of their individual relationships with each of their patients, and reduces the possibility of the boredom and burn out that comes from overfamiliarity with the tasks to be performed.

Reflexive practice in action

Reflexive practice is difficult to pin down for two reasons, firstly because its components blend together into one smooth operation and secondly because, unlike reflection-*on*-action, it takes place *in vivo*, in live, real-time practice situations. However, by reflecting *on* reflection-in-action, it can be seen to comprise of a number of discrete elements (Fig. 2) which include:

- reflecting on the clinical situation in order to build a body of personal knowledge about this patient in this situation;
- constructing an informal theory based primarily on this informal knowledge, but also on past paradigm cases and formal, research-based theory;
- formulating a hypothesis from the informal theory;
- testing the hypothesis by making a clinical intervention;
- reflecting on the transformed clinical situation and modifying or adding to the body of personal knowledge;
- constructing a new informal theory, and so on.

In order to see how reflexive practice works, let us take the example of a terminally ill patient who asks the nurse if he is dying. There are many possible reasons why a patient would ask such a question, ranging from a need for factual

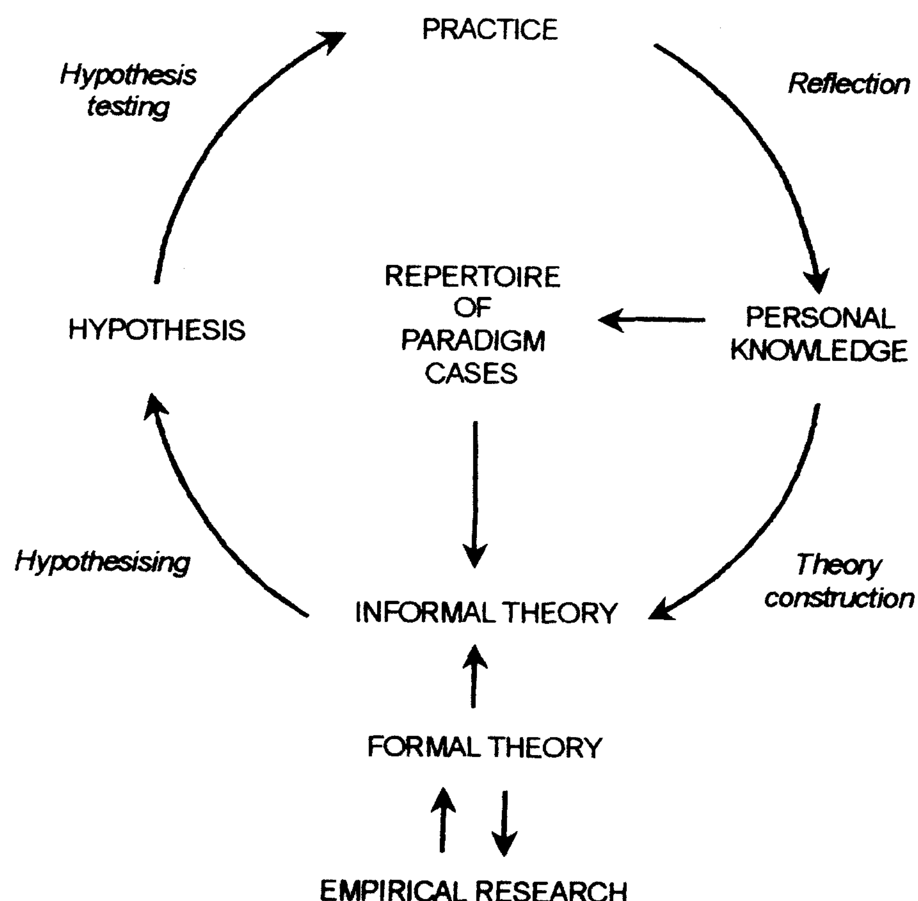

Figure 2.

information to a need for reassurance that he is *not* dying, and it is imperative that the nurse understands the unique needs of this individual patient in formulating his/her response. His/her decision on how to respond will therefore be based primarily on his/her personal knowledge of this patient, but will also draw on past paradigm cases from reflection-on-action with this patient and from similar situations with other patients.

Although this personal knowledge will provide the main factors in coming to a decision, he/she may also take from public, academic knowledge and theories in the form of principles of counselling or humanistic psychology, theories of ethical behaviour, and experimental research. However, these considerations will be secondary, they will provide a range of options for the generation of an informal theory about this patient in this situation, and will inform his/her practice rather than direct it.

Having constructed an informal theory about this patient, his reasons and motives for asking whether he is dying, and the most effective response, the nurse-practitioner now tests out a hypothesis based on that theory by responding to the patient and assessing the impact of his/her response. His/her informal theory might, for example, be that this patient genuinely wants to know whether he is dying in order to put his mind at rest, and that he is psychologically equipped to deal with the consequences of being told. Her hypothesis in this case would be that, if the information is given in a caring, sensitive and supportive manner, his anxiety and distress would reduce on being told. Having made his/her intervention, the reflexive practitioner then continues around the cycle again by making a new assessment of the transformed clinical situation, generating further personal knowledge, and so on.

This is primary nursing in its truest sense, and requires an intimate knowledge of the patient's physical condition, psychological make up and social situation that can only come from a sustained therapeutic relationship. It also requires the nurse to be able to think on his/her feet and synthesize personal, academic and scientific knowledge into a unique informal theory which can be immediately tested out and modified. And because the theory is reflexive to subsequent changes in the clinical situation, there is no hint of a gap between theory and practice. Indeed, they are two sides of the same coin, and as such, are impossible to separate. Theory and practice are one, and the reflexive practitioner is both researcher and theory-builder.

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