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Big Ideas

## From Novice to Expert: Benner's legacy for nurse education

Like most nurse academics, I am familiar with the basic tenets of Benner's seminal book *From Novice to Expert*, although like many of my colleagues, I had never sat down and read it from cover to cover. On properly reading it for the first time, I was struck by a double and somewhat unexpected irony. Firstly, that one of the most influential books on nursing theory in recent times is, if not *anti*-theoretical, then most certainly *a*theoretical. Thus, in the foreword to the original edition, Myrtle Aydelotte praises Benner for giving 'a lucid, colourful *description* [rather than theory] of nursing practice as rendered by expert nurses' (Benner, 1984, p. v, my emphasis and brackets). She goes on to say that, 'The value of this document lies in the understanding it gives us about the mystery of expert practice and in the creation of an awareness that we must respect this mystery, rather than pretend that we can dispel or standardise it by submitting it to rules, procedures, and regulation' (pp. v–vi). This apparent warning, which is echoed by Benner later in the book, is that we should not (indeed, we cannot) look too deeply into the 'mysteries' of expert practice. Indeed, when expert practitioners are asked to describe their practice, the accounts they give are not a reflection of what they actually do; there is a mismatch between their espoused theories and their observed actions. Thus, 'formal structural models, decision analysis, or process models cannot describe the advanced levels of clinical performance observable in actual practice' (p. 38). Benner cautions that it is not simply 'that the rules and formulas just move to the unconscious level or go underground' (p. 37); there *are* no rules and formulas. Further, according to Benner, if experts are forced to practice by the book, according to established research- and theory-based procedures, their performance actually deteriorates. Benner's 'theory', then, is that expert practice cannot be theorised.

A second irony is that this theory for which Benner is so well known and which established her reputation is not her own, and neither was it intended to be the focus of her book. Interestingly, the model of skill acquisition was developed by Hubert and Stuart Dreyfus and was used by Benner as a framework for analysing her research data, resulting in 31 competencies categorised under seven domains. In the preface, Benner warns against 'hasty system builders who will want to deify the 31 competencies described …' (p. xxii). However, she need not have been concerned, since her model of domains and competencies failed to catch the imagination and is now largely forgotten in comparison to Dreyfus and Dreyfus's 'Novice to Expert' model of skill acquisition, which was intended solely as a system for ordering and categorising her data, and which comprises only the first two chapters of this 14 chapter book.

The origins of Dreyfus and Dreyfus's novice to expert model can be found in Hubert Dreyfus's book *What Computers Can't Do*, first published in 1972. Hubert Dreyfus was a professor of philosophy who argued that the so-called artificial intelligence displayed by computers was, in fact, nothing of the kind. Computers could not and would never be able to think or display intelligence in the way that people can, simply because computers are not and never can be people. As he wrote in a later book *Mind over Machine*:

> …computers are analytic engines. They can apply rules and make logical inferences at great speed and with unerring accuracy. To exactly the extent that rules and inferences have a crucial place in everyday human affairs, the computer has a place in improving and implementing logical thought. Since the extent is limited, so also is the place of the analytic engine (Dreyfus and Dreyfus, 1986, p. xxi).

Computers, he argued, can be programmed to make logical decisions based on an extremely rapid analysis of huge amounts of information, but can never be programmed to be intuitive or even to display common sense. Further, Dreyfus argued that expertise becomes 'embodied' so that 'an expert's skill has become so much a part of him that he need be no more aware of it than he is of his own body' (Dreyfus and Dreyfus, 1986, p. 30). For example, expert pilots no longer experience the aircraft as separate from themselves but rather as an extension of their bodies. But, of course, computers do not *have* bodies, and can therefore only ever be competent pilots, albeit *extremely* competent pilots. Dreyfus's argument was that computers analyse information and take decisions in the same way that people do when they first begin a new activity or occupation. Computers can reach the stage of competence, but can never progress beyond it to become experts in the sense that we use the word when we apply it to people.

When Benner applied this novice to expert model to the transcripts of her interviews with nurses, she found that more experienced practitioners were more likely to display what Dreyfus referred to as 'intuition' or 'gut feeling'. For example, Benner quotes 'an expert psychiatric nurse clinician':

> When I say to a doctor, 'the patient is psychotic,' I don't always know how to legitimize that statement. But I am never wrong. Because I know psychosis from inside out. And I feel that, and I know it, and I trust it. I don't care if nothing else is happening, I still really know that (Benner, 1984, p. 32).

The very fact that we could never even *imagine* a computer offering such a rationale for its decision lends weight to Dreyfus's argument, but at the same time, the apparent lack of any logic ('I feel that…), doubt ('I am never wrong'), ability to put their knowledge into words ('I don't always know how to legitimise that statement') or reliance on evidence ('I don't care if nothing else is happening…) has caused concern and fuelled criticism of so-called expert practice. Experts typically do not apply research-based theories or evidence and act without any rules, formulas or rationale. As Dreyfus and Dreyfus (1986) point out: 'Competent performance is rational; proficiency is transitional; experts act *arationally* […] in a manner that defies explanation' (p. 36, my emphasis).

Benner's work began to catch the imagination of nurse academics in the UK just at the point when nurse education was taking on a

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more theoretical aspect and moving into the higher education sector. The introduction of the *Project 2000* curriculum signalled a move away from the clinically-based apprenticeship model of nurse training towards a classroom-based theoretical approach, and proposed Donald Schön's work on reflective practice as a way of holding together the newly separated theoretical and practical components of the curriculum. The fact that both of these developments were counter to Benner's 'novice to expert' framework was hardly noticed at the time, and many curriculum submission documents included reference to the work of both Schön and Benner as underpinning their educational rationale.

On the one hand, Benner was suggesting that more advanced levels of practice are atheoretical and cannot be articulated in terms of rules, guidelines and principles. Educators cannot theorise about expert practice because there is nothing to theorise about; they cannot teach it because there is nothing to teach. As Dreyfus and Dreyfus point out about the practice of doctors:

> In reality, a patient is viewed by the experienced doctor as a unique case and treated on the basis of intuitively perceived similarity with situations previously encountered. That kind of wisdom, unfortunately, *cannot be shared* and thereby made the basis of a doctor's rational decision (Dreyfus and Dreyfus, 1986, p. 200, my emphasis).

On the other hand, the novice to expert model challenges Schön's notion of the reflective practitioner. From Benner's perspective, reflection-*on*-action is pointless because intuitive decisions do not arise from rational thought and cannot therefore be reflected upon and articulated afterwards. Similarly, reflection-*in*-action is not only pointless but downright dangerous since 'if experts are made to attend to the particulars or to a formal model or rule, their performance actually deteriorates' (Benner, 1984, p. 37). Experts who reflect in action immediately regress to the stage of beginner.

If the novice to expert model of skill acquisition is properly and fully adhered to, then Benner's legacy for nurse education proposes a somewhat limited role for the academic lecturer. It suggests that formal models and theories of nursing are of use only to novices, and even then should be regarded as provisional until the student acquires enough concrete experiences to enable him or her to override them. It is important, therefore, that the pre-registration student spends as much time as possible in clinical practice gaining experience and observing more experienced nurses at work. For the postgraduate student, the transition from competence to expertise relies almost exclusively on the accumulation of real-life 'concrete examples' (p. 193) acquired through clinical experience. In both cases, Dreyfus (2001) insists that the most effective approach to education is through an apprenticeship model rather than from theoretical lectures.

Thus, both for Dreyfus and for Benner, whilst nursing practice can be learnt, it cannot be taught. For beginning students, nursing models and theories are necessary in order to compensate for a lack of experience. However, adherence to theory produces stultified and inflexible rule-bound practice that cannot respond to new or unexpected situations, and practice based on theory gradually gives way to intuitive and arational practice as the student acquires more and more concrete experiences to draw on. Education for practice therefore requires the student to learn in and from practice alongside more experienced practitioners. From this perspective, the classroom teacher has little contribution to make to the education of practitioners once they have reached the level of competent.

Whether or not we accept the educational implications of Benner's book *From Novice to Expert* depends on whether we accept that, at the highest level, practice cannot be articulated, reflected upon, theorised or communicated to more junior colleagues in any deliberative way. Donald Schön, writing a year before Benner's book was published, regarded such a position as mistaken and anti-educational. In contrast to Benner's psychiatric nurse who 'just knows' that a patient is psychotic but makes no attempt to justify or legitimise her knowledge, Schön maintains that:

> When people use such terms as 'art' and 'intuition', they usually intend to terminate discussion rather than to open up inquiry. It is as though the practitioner says to his academic colleague, 'While I do not accept *your* view of knowledge, I cannot describe my own'. Sometimes, indeed, the practitioner appears to say, 'My kind of knowledge is indescribable', or even, 'I will not attempt to describe it lest I paralyse myself'. These attitudes have contributed to a widening rift between the universities and the professions, research and practice, thought and action (Schön, 1983, p.vii–viii).

So-called experts who claim to base their practice on tacit knowledge and intuition and who cannot or will not justify it to their peers are either fooling themselves or are acting in bad faith. For Schön, the rift between the theoretical 'knowing that' taught in universities and the practical 'knowing how' required by the professions can be bridged by academics and practitioners working together in order to create a reflective culture where knowledge is derived from a structured approach to thinking about practice.

I began this paper by confessing that, like most nurses, I had not until now read *From Novice to Expert* in its entirety, nor had I fully considered its implications for nurse education and educationalists. Had more nurse academics carefully and thoughtfully read even the first two chapters, we might perhaps have been spared some of the excesses of the turn to theory in the 1990s which saw the move away from the apprenticeship model towards a greater emphasis on classroom-based theory and fewer hours spent in clinical settings. On the other hand, had more nurse academics fully understood and assimilated the fundamental implications of Dreyfus's view of expertise, the profession might have been less accepting of the reflective practitioner who is mindful of their own practice and is able to articulate it and pass it on to students and colleagues. Seen in this way, Benner's legacy is shaped as much by what she did *not* write as by what she did, and perhaps in turn by what we do and do not read!

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