DIALOGUE IN HEIDELBERG

Expert nursing as skills acquisition – milestone or millstone?

Benner's seminal work *From Novice to Expert* has influenced an entire generation of practitioners, educators and managers, and in many ways represents a milestone in our understanding of the epistemology of practice. I wish to argue, however, that it is based on questionable foundations; that the model of skills acquisition postulated by Dreyfus & Dreyfus has been taken out of context and applied inappropriately to nursing.

The essence of Dreyfus & Dreyfus's model of skill acquisition is their assertion that whereas novice practitioners follow rules, experts act intuitively and are unable to verbalise their practice. In order to fully understand this position, it is necessary to explore the context in which Dreyfus & Dreyfus developed their model of expertise. Stuart Dreyfus, a computer scientist, and his brother Hubert, a philosopher, had for many years argued against the accepted view of artificial intelligence (AI); namely that computers can simulate human intelligence through programs or algorithms, and by implication, that human intelligence can itself be reduced to such algorithms. In 1965, Hubert published a paper entitled 'Alchemy and artificial intelligence', which challenged the received view to such an extent that "students and professors working on the robot project [at M.I.T.] dared not be seen having lunch with me without risking getting into trouble with their superiors" (Dreyfus & Dreyfus 1986). This in turn led brother Stuart to the conclusion that "no matter how much more work was done in computer simulation and operations research, and no matter how sophisticated the rules and procedures became, such analytic abstractions would never allow the computer to attain expertise" (Dreyfus & Dreyfus 1986). The conclusion reached by the Dreyfus brothers was simple: computers could never be programmed to simulate human expertise because human experts do not think and make decisions in a rational way. Thus, "problems involving deep understanding built up on the basis of vast