

Novice to expert

Many DCPs are now looking to achieve personal professional fulfilment through addressing the challenges that their work in the dental sector presents to them, says **Debbie Reed***.



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Inspired by expert practice

In looking back over the span of a career it is often possible to identify role models, inspirational people who have had a positive influence - albeit in a small way - over what has been achieved. Often such role models may be viewed as having a certain 'expertise', or something special which might be difficult to define or specifically describe, but recognisable nevertheless. For me, it was colleagues such as Pauline and Jacqui; people who seemed to have all the answers, intuitively getting 'it' (whatever that was) right in what appeared to be the most complex of situations. Both appeared to have a vast knowledge, across a broad spectrum of experiences, from which they offered safe, effective solutions to issues and situations, not outlined in any textbook. They also shared another characteristic, that of being able, and what's more prepared, to share and invest in those less experienced as I was at the time - thank goodness! Along with others, such as Richard and Adrian, who were willing to guide me, along with countless other novices too, stretching our aspirations far beyond what we imagined was possible at that time in our working lives. They encouraged us to really engage with our work and seek personal meaning from it, a very enlightened view for back then. For such illumination on the initial stages of my journey I will always have deep gratitude and the utmost respect.

Meaning through DCP practice

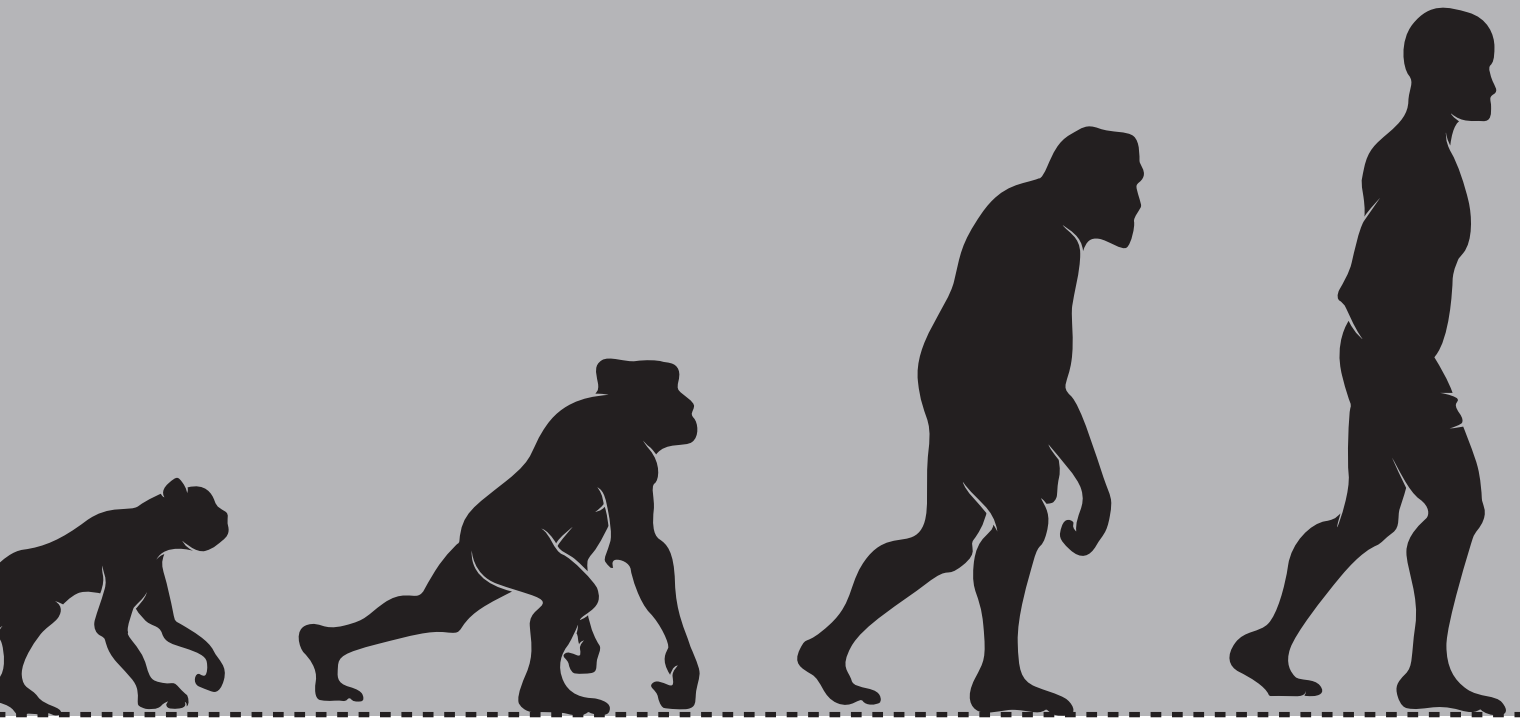
More recently there does appear to be a growing realisation that it is possible for dental care professionals (DCPs) to gain

meaning through their work. That is to say, many DCPs now expect to be interested and actively involved with work, looking to achieve personal professional fulfilment through addressing the challenges that work within the dental sector presents.

Through developing professional engagement, rather than being a passive recipient, DCPs are able to actively apply their knowledge and understanding through the increasing scope of practice. DCPs are now able to provide a range of patient care, which is significant and meaningful and which extends their overall involvement with treatment of the patient. Such changes in attitudes to work, as well as changes to the environment and the level of professional competence, leave DCP practice which my colleagues in the past would barely recognise. The challenges set by the additional professional responsibilities and imperatives of accountability,¹ as well as increasing professional expectations of both patients and colleagues about the nature of our contribution, present an opportunity to increase meaningfulness from the work we do.

DCPs recognise their essential contribution within the dental team addressing the oral health needs of a patient, seeking to meet such challenges by embarking on a personal professional journey from being a novice to being an expert DCP. This journey is one that requires determination and tenacity, and the accumulation of sound contemporaneous knowledge and the judicious application within practice, thus extending competence through a varied and rich array of experiences.

With advanced knowledge and increasingly complex treatments, DCPs are required to



have extended professional capability and engage critically when carrying out their professional duties. It has been suggested that through professional reflection and the examination and evaluation of personal core capabilities DCPs have evolved beyond what has been previously.²

Professional depiction is possible through adopting an evidence-based approach to our practice. DCPs both understand and are able to discuss the underpinning principles of the care that they are participating in, their own experience related to the care being provided, as well as the unique requirements of each individual patient.

Background to novice to expert

The concept of such a 'novice to expert' journey is not new or unique. In fact it is possible to gain a wealth of understanding from the experiences captured by other professional groups who have studied and outlined their own pathway of professional development, both within and external to healthcare.

So prior to considering the idea that DCPs might have a traceable journey of development along an identifiable, staged pathway, it is necessary to explore the background within the other professions.

The concept of 'novice to expert practice' was initially explored and explained by two brothers working on research for the American Air Force (Stuart Dreyfus and Hubert Dreyfus). Their research in the 1970s and early 1980s aimed to identify the sophisticated staged developmental and experiential journey made by a student

wishing to acquire the necessary skill to be considered an 'expert' pilot.³

Dreyfus and Dreyfus's model proposed that a student passed through five distinct stages of development and skills acquisition: novice, advanced beginner, competent performer, proficient performer, and finally expert performer.

Novice to expert in health care

Later the principles of the Dreyfus and Dreyfus model were applied into a healthcare context within a key text for nursing

professionals by Dr Patricia Benner in 1984.⁴ Benner led research from novice to expert practice within nursing, the results of which were used to inform a model of development. Benner's work details the concept of expert nurses: as one who builds extensive knowledge and skill, through a wide range of experience. Benner's idea of novice to expert in this area of health care is premised on a single crucial factor: that the individual commencing at novice level will do so with a robust and sound professional educational base and will possess the core attitudes related to lifelong learning, such as a commitment to continuing professional development (CPD) and ongoing education.

Benner's model suggests a 5-stage journey (Fig. 1), similar to that outlined earlier by Dreyfus and Dreyfus. The model supposes that those embarking on a career in nursing have a sound level of basic knowledge and skill, acquired through initial preregistration training, along with an attitude of being prepared to commit to the principles of lifelong learning and continuing professional and personal development for the extent of their professional lifetime.

The Benner model is progressive, going up in stages, as well as being reliant on the nurse transiting from one level to the next, as familiarity and experience from work is gained and instilled at a particular level. Like Dreyfus and Dreyfus' original model of novice to expert, Benner is also inextricably linked to the concept of experiential learning, such as learning in a work based context and learning through interaction with, and in support of, other colleagues.

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Benner talks about the necessity of gaining a rounded and full experience, and about the importance of both 'knowing how' (knowledge and skill), as well as 'knowing that...' (learning the theory) but she also recognised that it was possible to 'know how' and function on a basic practical level without 'knowing that'. However, it was an accumulation of both 'know how' and 'knowing that' which led to expert practice.

Applying the principles to DCP practice

Our regulatory body, the General Dental Council (GDC) reminds us that professionals should maintain professional knowledge and competence: *'Find out about current best practice in the fields in which you work. Provide a good standard of care based on available up-to-date evidence and reliable guidance.'*¹

Is it possible to adapt and apply the principles of transiting from novice to expert DCP practice to provide a good standard of care and if so what might that look like?

Well, due to the practical clinical nature of the dental professions it may be possible to adapt and introduce the principles of novice to expert practice in a general way to a DCP context. It is possible to start to consider and argue that one of the prerequisites for an 'expert DCP' may be the demonstration of professional practice, that is to say the practical application of skill which is underpinned by a sound knowledge basis; a thorough sound understanding of the evidence bases for treatment and procedures conducted within our own scope of practice; and within the scope of others from whom we provide essential support.

As with other healthcare professionals, if we seek to take an evidence-based approach then it is necessary to consider theory and research, in conjunction with our own professional reasoning and judgement, as well as patient needs. The extent to which we are able to do this can be traced within the progressive stages of development from novice to expert practice. For DCPs, expert development may be achieved through the application of tacit knowledge, knowledge which is internal

to the individual and not easy to explain or transfer to another, but which has been accumulated and acquired through a combination of personal experience and development opportunities. This tacit knowledge enables the expert DCP to explore what particular action is necessary, supported and justified through an appropriate evidence base.

Appropriate interpretation and application of knowledge requires judgement, professional understanding and critical thinking skills, high order learning skills involving analysis and evaluation, skills and abilities which all need to be developed and demonstrated over a period of time.⁵ These high order skills have also been associated within the process of professional reflection which is considered to be the 'thoughtful process in which we [DCPs] explore our experiences from a variety of viewpoints and then attempt to gain further understanding and new perspectives through exploring literature and evidence, which lead to advances in professional practice'.²

It is important to remember that the principles of novice to expert did not originate in health but through the observation of the development process of people under instruction. Therefore it is possible to translate and trace the staged journey through the variety of separate situations which might be being experienced at any given point within a professional lifetime. Crucially it is important to remember that whilst an individual might be 'seen' as expert in one situation or a set of circumstances, they may also be a novice in another, for example an individual might be expert within their particular work role but novice when required to learn a new

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procedure, or attend a training course or participate on an academic programme. It is important to recognise that such situations can be uncomfortable for the individual and associated with unfamiliar feelings such as vulnerability, anxiety and nervousness. Although this could be turned into an opportunity to understand what novice colleagues might be experiencing and how an 'expert' might reassure and encourage the novice to persevere in their endeavour.

To support the process of growth Tynjala's 'Seven principles of expert development' are helpful (Tynjala,⁶ cited in Gray⁸). These suggest key considerations which may facilitate professional development (Fig. 2).

An example of expert practice

So what might expert DCP practice look like? Benner⁹ summarised 'expert' as being capable to go beyond the tasks and to read and respond to the wider picture. So if we take the matter of oral health (OH) messages: a novice DCP conveying an OH message may concentrate on the technical aspects of brushing technique: brush positioning, toothpaste, duration and frequency and be supervised by colleagues whilst doing so. An expert DCP will convey the OH message independently, intuitively integrating knowledge of current and contemporary evidence bases, with specific individual patient needs: physical, social and economic. The expert implicitly integrates within the overall message a relevance to individual lifestyle, domestic responsibilities and other personal circumstances, all of which affect the likelihood of a patient adhering to the regime being suggested. The expert DCP is alert to previous dental and treatment history, as well as to signs of more recent medical conditions or physical impairment and makes the necessary adjustment. The expert is able to recognise the limits of their own capabilities and is able to refer on, or back to, other colleagues within the dental team to ensure that the needs of the patient are met by the colleague with the competencies and scope of practice to provide the most appropriate level of intervention necessary.

Conclusion

As DCPs we are increasingly seeking meaning from our work and what might lead us toward expert practice. We recognise that the extent of our own development is relevant on that journey from novice to expert practice, and progress takes time, application and effort. Is it possible that DCP expert practice is about gathering knowledge and accumulating professional experiences, reflecting and seeking opportunities for personal growth and

Fig. 1 Principles of novice to expert development – a DCP interpretation
(Reed⁷ - Adapted from Benner⁴)

Novice – Little or no previous understanding or experience of events, circumstances or environment, therefore clear rules, protocols, supervision and general direction are required to achieve the safe performance of basic tasks in routine situations and on how to reflect to improve own performance.

Advanced Beginner – Able to perform basic tasks and is able to respond in the case of minor variations which are beyond the routine nature of tasks, although this requires supervision and encouragement to reflect and adapted to non-routine situations and meet the diverse needs of some patients.

Competent – Is able to work unsupervised to plan routine tasks and processes, following guidelines and procedures. The individual is reflective, recognising and seeking guidance for tasks beyond the limit to extend their knowledge and skill and expand their experience.

Proficient – The individual has a deep understanding of all the additional and underpinning factors affecting treatment and an understanding of contemporary evidence bases. The individual see the full multi-dimensional nature of a given situation, rather than simple isolated, albeit connected tasks. The individual is reflective and able to adapt and modify their practice appropriate to meet the requirements of the various factors, within a broad range of situations, and is able to justify and evidence base their action, as well as appropriately guide the performance and development of others.

Expert – Has a deep and rich evidence-based and applied practical knowledge. An intuitive recognition regarding the application of evidence, applying it judiciously and considered proportionality and appropriately to the needs of the patient, as well as own professional experience. Their experience is extensive: across the broadest range of situations and circumstances and in testing conditions. They are reflective and able to articulate and discuss their understanding and teach others about the principles of practice, as well as contractions and exceptions.

evaluating our experiences and performance in order that we can develop over the period of our professional lifetime?

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Fig. 2 Seven principles for expert development
(Tynjala,⁶ cited in Gray⁸)

1. Concentrate on using and transforming knowledge rather than memorising and reproducing it.
2. Expert development is about both acquiring and using knowledge; these are not separate and individual activities.
3. Contextualise and adapt knowledge and theory through application in problem solving.
4. Seek to expand our understanding of how we develop as learners: how we think, our own learning styles, preferences and individual needs, as well as about subject content.
5. Discourse and interaction with others is pivotal to our own expansion within the development process.
6. Include evaluation and measurement of our learning within each development activity.
7. Engage in the measurement and evaluation of development activities to understand the extent to which activities are applied to develop our practice.