IN BRIEF

- Provides an insight into the notion of expertise in VT.
- Explores some of the attributes of trainer expertise.
- Provides a model to signpost the path to 'expert'.

VERIFIABLE CPD PAPER

Dental vocational training: identifying and developing trainer expertise

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Aims The aims of the study were two fold: to determine the influence of trainer expertise on the Vocational Training (VT) experience, particularly in terms of providing Vocational Dental Practitioners (VDPs) with positive role models; and to ascertain if it is possible to identify attributes of expertise that can signpost a successful path for new/less expert trainers. **Participants** Thirty-five VDPs and each of their Vocational Trainers participated in the study. All training took place in the South East of England. **Design** The participants were followed through the 12 months of their VT year. Semi-structured interviews were conducted with both trainers and VDPs on two occasions, during the year and once VT had been completed. It was also possible to observe practice sessions and VT Study Day teaching. The descriptive analysis of the training partnerships has been previously described.1 The original data were revisited through a constant comparative analysis of the interview transcripts and observation notes. **Results** The influence of training expertise is identified and discussed as is the VDP view of the trainer as a role model. Attributes of training expertise are highlighted and presented as a guiding path for new/inexpert trainers. **Conclusion** The training expertise of a trainer has a significant influence on the VT experience for both trainer and VDP. Expertise has the potential to be harnessed and used to good effect in VT.

INTRODUCTION

Immediate post-qualification training is now compulsory for UK dental graduates if they wish to practise in the General Dental Services. Most will take the path to general practice. To do this, they must undertake a 12 month period of Vocational Training (VT) as a Vocational Dental Practitioner (VDP) under the immediate supervision of a Vocational Trainer.

Administratively, VT is divided into 15 regional deaneries. A Regional Adviser co-ordinates and monitors each of the schemes in that region. Each scheme, which consists of 12 training practices, is organised and similarly monitored by a VT Adviser. There are around 700 training places nationwide.

In VT the VDPs develop as general dental practitioners and enhance their clinical and management skills. The trainer is expected to devote at least one hour a week to tutorial tuition. The VDP also attends a scheme programme of study days. These provide the formal educational component of VT and they are designed to complement the practice teaching.

In England and Wales there is no formal, end of VT assessment. The Professional Development Portfolio (PDP) is the primary assessment tool although most deaneries require VDPs to complete a 'case presentation' or and/or an audit project. There are many[2-4] who argue that the PDP lacks rigour and a more formal arrangement is necessary. Arguing for just such an arrangement, Gibson[2] suggests that:

'...the lack of compulsory assessment means that a robust, well defined system of identifying and managing poorly performing trainees [VDPs] and poor quality training is lacking. In practice, this results in the training year becoming entirely dependent upon the experience, commitment and teaching ability of a particular trainer. New trainers have limited preparation for their training year...'

Some may take issue with Gibson on the need to take a formal assessment route in VT but that is for debate elsewhere. Critically Gibson recognises that the performance of the trainer is a significant factor in the success of the VT year, and in particular the 'new' trainer is in a potentially vulnerable position. Following the theme that trainers need support and that they may not always be successful in their training role, Gibson continues:

'It is widely accepted that the VT year is an essential period of protected time which enables new graduates to make the transition from undergraduate to independent practitioner... There is

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evidence that only 80% [of VDPs] believe that [VT] succeeds in this aim (Baldwin et al.[5]).'

Baldwin *et al.*[5] in fact noted that one third of 183 Scottish graduates stated that their trainers did not form a positive role model. And Ralph *et al.*[6] found that of 154 Leeds graduates, over 30% had difficulties with the team, in particular their trainers, who failed to provide support, encouragement or help.

These findings are disappointing as regional deaneries go to significant lengths to recruit skilled trainers, but there is gathering evidence[1,7] which suggests that VT is a very successful period of postgraduate education.

THE QUESTIONS

The comments of Gibson[2] and the studies of Baldwin *et al.*[5] and Ralph *et al.*[6] may cast doubt on the ability of some trainers to provide a quality education.

However, VT is continually evolving. Rather than attempt to identify why in some cases VT fails in its aims, it is more appropriate and potentially more valuable to explore and make explicit what it is that makes the majority of the training partnerships work well.

As Gibson notes, it is reasonable to surmise that the teaching expertise of the trainer will have an impact on the success of the VT year. But what is the influence of that expertise, particularly in terms of providing VDPs with positive role models?

Is it possible to identify attributes exhibited by expert trainers that can signpost a successful path for new/less expert trainers?

METHODOLOGY

In previous reported work[1] the authors have presented a descriptive analysis of the VT experience. Thirty-five VDPs and their trainers were followed through their VT year. All the VDPs were graduates of the King's College London Dental Institute and all participants undertook VT in the South East of England. Each VDP and trainer was interviewed on two occasions: halfway through the VT year and again once the year had come to an end. The discussions were wide ranging, but centred on the areas of VDP selection, and the management and delivery of education in VT. It was also possible to observe practice sessions, tutorials, and VT study days.

The VDPs recruited were those who had shown an interest in participating in the study. They were in essence a self selecting group. The trainers were effectively chosen by the VDPs. The trainers had been qualified for a mean of just over 21 years. They had taught on average five VDPs; the range of training varying from the VDP being the trainer's first, to trainers who had been involved in training for more than ten years.

The descriptive analysis suggested that VT was a success for VDPs and for the trainers. In order to ascertain why the VT year was a success and in particular the influence of trainer expertise on the success of the year, the original data were revisited. Themes suggesting a successful VT partnership and evidence of training expertise emerged through a constant comparative analysis of the interview transcripts and observation data.[8] This analysis was undertaken by hand as qualitative software tends to ignore the nuances of developing themes.

THE NOTION OF EXPERTISE

The development of professional competence in general practice is the whole point of vocational training. The problem is to determine how this can be achieved. Ryle[9] argues that when people perform an action they cannot always articulate the theory underlying that action. They actually forget the original rules. Nyri[10] suggests that through continuous experimentation new knowledge is gradually absorbed from experience which might never have been articulated. Practical knowledge is therefore 'hidden in the practitioner', as an undisclosed network of understanding.[11] In Polanyi's[12] words, it has become 'tacit knowledge'; knowledge that cannot be expressed in words.

Eraut[13] suggests that much of what is termed skilled or professional behaviour falls into the category of tacit knowledge. The crucial significance of tacit knowledge in professional practice is that it poses problems in learning how to perform skilfully. If the expert dental practitioner is him/herself not aware of how they are expert, as a trainer it will be difficult to pass this knowledge of how to practise on to the student/VDP. If trainers are going to succeed in teaching professional skills, they must themselves know how and why they are performing particular skills. They must be able or enabled to make their tacit knowledge explicit.

Argyris and Schon[14] argue that professional actions are based on implicit 'theories in use'. They suggest that making these theories explicit and therefore open to criticism is the key to professional learning. The key here is the quest for good feedback, which may well be adverse. Good use must be made of it by being open to interpretations that challenge your own assumptions.

VT advances a relational model of progression. In parallel with their VDPs, the trainers are themselves undergoing their own skills progression and this fact is crucial to the understanding of how VT functions at a practice level.

There are many models of skills progression and that of Dreyfus and Dreyfus[15] is well known and would appear to be entirely appropriate in charting trainer progression in VT. This model posits that as a practitioner develops a skill, s/he passes through five levels of proficiency. These are novice, advanced beginner, competent, proficient and expert. These changing levels reflect changes in three aspects of skilled performance. The first is a movement from relying on abstract principles to using past concrete experiences as paradigms. The second is a changing view in the practitioners' perception of the situation, which is seen less as a compilation of equally relevant parts and more as a complete whole in which only certain parts are relevant. The third is the passage from 'detached' observer to 'involved performer'.

The significant attributes of each level are outlined in Table 1. Eraut[13] suggests that the strength of the Dreyfus and Dreyfus model lies in the case it makes for tacit knowledge and intuition as critical features of professional expertise. Most of the performance of the expert is automatic, and non-reflective. The expert will only move out of this mode on the occasions that the task in hand is particularly difficult or critical, or because they have critically reflected on their own intuition and are reconsidering the initial action.

Identifying expert practice is a very difficult task. Benner[16] in her detailed analysis of nursing expertise specifically avoids defining the expert. She does however provide a comprehensive account of the term in the context of a nurse demonstrating his/her expertise in clinical practice. We suggest that the

strength of the Dreyfus and Dreyfus model for trainer development is that the practitioner can identify the attributes that indicate developing expertise. Locating a practitioner's position on the Dreyfus model will be very difficult, but the attributes of each stage are identifiable and have the potential to sign the path to expert very effectively.

Manley and Garbett[17] note that a key insight into identifying and judging expertise is that experts require facilitation to demonstrate their expertise and help them highlight the knowledge embedded in their practice. Central to developing recognition of expertise, these authors consider the notion of critical companionship; a notion that seems to encapsulate the advice given by Argyris and Schon[14] for the development of professional practice.

The critical companion can enable practitioners to critique their teaching practice and build a portfolio of evidence to include structured reflections. The notion of the critical companion would appear to be entirely appropriate for enabling the less expert to identify attributes that will guide their path to expert and for the expert clinician to make his/her expertise explicit.

Table1 The Dreyfus and Dreyfus Model of Developing Expertise

Novice	Rigid adherence to taught rules; little situational perception; no discretionary judgement.
Advanced beginner	Guidelines for action based on attributes or aspects; situational perception still limited; all attributes and aspects are treated separately, with equal importance.
Competent	Coping with crowdedness; actions seen at least partially in terms of long-term goals; conscious deliberate planning; standardised and routinised tasks.
Proficient	Sees situations holistically, rather than in terms of aspects; sees what is most important in a situation; perceives deviations from normal patterns; decision making less laboured. Uses maxims for guidance, whose meaning varies according to the situation.
Expert	No longer relies on rules or guidelines; intuitive grasp of situations based on a deep tacit understanding; analytic approaches used only in novel situations or where problems occur; vision of what is possible. (summary from Eraut 1994, p 124)

THE IDENTIFIED ATTRIBUTES OF TRAINING EXPERTISE

The following section considers the identified aspects of trainer participant behaviour and/or management that within the analysis, appeared to be key factors in ensuring that the VT year was a success. These are also factors that influence a VDP's view of his/her trainer as a role model.

These factors can be considered as the attributes of training expertise and the analysis will be considered against a background of the Dreyfus and Dreyfus model[15] of expertise.

Selection of VDPs

When selecting a VDP, over half of the trainers suggested that it was essential that the VDP fitted into the team and that personality was the factor that enabled them to make that decision. The most experienced of the trainers spent considerable time selecting their VDP. Selection was far more than just an interview; one trainer of over ten years' training experience suggesting that a 20 minute chat was simply not enough. Having briefly interviewed usually between five and ten prospective VDPs, these trainers then brought two or three back to spend a few hours with them and their team. Another trainer, also with more than ten years' experience, suggested that this was the key to success in VT. She noted however, that selection was a very time consuming process – but it was time well spent.

Assessment in VT

The PDP was not successful as a method of assessment. Only three VDPs reported that their trainers and advisers checked it regularly. Seven other VDPs noted that their trainers and advisers had not asked to see it at all in the first six months of training. Four trainers suggested that the PDP was invaluable; they actually structured the year around it. One of the four highlighted his concern that few in VT knew how to use the PDP properly. Interestingly, this group of four had taught for a mean of over eight years.

Nursing support

The need for reliable nursing support and the fact that many nurses in the practices were inexperienced was a concern with VDPs. Halfway through the year, the trainers were of the opinion that their VDPs had the 'basics' of general practice in place. It was then that the VDPs were keen to work with enhanced efficiency and any inadequacies in nursing support were highlighted.

The majority of the trainers were explicit in their acknowledgement of the positive role a VDP's nurse could play, but this did not necessarily translate into ensuring that the support was there. It was the most experienced, perhaps expert trainers who took that extra step. These trainers ensured that a VDP always had a nurse and the best available; an expert nurse who could perform as an in-surgery teacher/mentor. The nurse, of course, is the only person who can legitimately monitor a VDP's clinical work without overtly undermining his/her confidence. S/he is in a unique position to identify and possibly defuse problems almost before they arise. These trainers would go without nursing support themselves rather than put their VDP in that position.

The practice tutorial

Specific guidance is given on education in VT but in spite of this, the mandatory tutorial was often forgotten or ignored – certainly in the second half of the year and usually by the more inexperienced trainers. It was clear from the interviews that at least some of the novice trainers were uncomfortable with the academic aspects of the in-practice teaching. They did not feel that they had the academic background to tackle theory-based issues. We can assume these trainers were expert clinicians; the problem they had was making explicit the wealth of knowledge underpinning their practice.

The trainer as a role model

The VDPs discussed the notion of 'trainer as role model' at considerable length. The overwhelming majority of the VDPs saw their trainers as positive role models. The VDPs were aware that some trainers were more skilled, perhaps more expert than others. Crucially they appreciated

that some trainers were learners just as they were. But it was absolutely essential that these trainers appreciated that the VDPs themselves were novice practitioners and adjusted their expectations accordingly. In the few cases where trainers were not highly thought of, unreasonable expectation was always the primary concern of the VDP.

Showing that they valued their VDPs was key to trainer success in VT – and the VDPs reported that most did this. The VDPs were aware of their novice status, but they were professional colleagues and if they felt that their opinion counted – that they were a valued member of the team, the likelihood was that the year would be a success. One trainer in his eighth year of training who enjoyed every moment of VT commented:

'You must let them know that they are an important member of the team ... that they have something to contribute. And give them feedback ... don't just see things that go wrong. Get them to show you what they're proud of. Let them know when they are doing well.'

Crucially, regardless of their view of their trainers, not one VDP would have wanted to go into general practice without undertaking VT. The overall experience was a positive one.

The issue of training inexperience

Although there were quite a few trainers in the first or second year of training, there were only two who were perhaps at the novice end of the expertise model. Neither of their training partnerships ran smoothly, but one did develop into a successful partnership after a difficult start. This trainer seemed almost in awe of his VDP's knowledge and to begin with, he suggested he had nothing to contribute to her education. For the first four months he didn't hold tutorials.

His VDP kept a detailed reflective diary and through this it was possible to chart the trainer's progress. To begin with, he was rigid; he stuck to his rules, and saw no other way to do things other than his way. But as the year progressed, in parallel with his VDP, he was undergoing a progression in his own training skills and was approaching perhaps advanced beginner on the Dreyfus and Dreyfus model. His confidence and attitude changed, the tutorials started and were well received. Trainer and VDP were developing their skills together.

Trainer confidence

A theme underpinning the above observations is confidence. As this trainer's training skills developed, so did his confidence. The relationship developed and trainer and VDP worked together to develop their respective skills. Confidence appeared to underpin the behaviour of so many of the trainers at the expert end of the progression. It is impossible to separate the role of trainer from that of clinician. Part of the ability to step back and not interfere is the knowledge that you are able to handle any clinical problem that may arise as a result of the actions of the VDP. The following is an example from one (relatively inexperienced) trainer handling the perennial problem of minor oral surgery.

This trainer was aware that his VDP was weak in oral surgery and she had tried to avoid it. Like other trainers he often booked a patient in during the tutorial session, so they could treat the patient together. He did the first case; she did the second with his assistance and for the third, he let her get on with it. She knew that he was just next door. She also knew that whatever happened, whatever problems she caused, he could handle it and handle it in a manner that did not undermine her.

Trainer expectations

One training partnership did not reach a successful conclusion. This trainer was in his first year. He was learning; he was a novice. He had very high expectations of his VDP and their relationship was a difficult one. The VT adviser was heavily involved almost from the beginning, but despite this intervention, and the best intentions of both trainer and VDP, the relationship never developed. This trainer was an expert practitioner, but he was a novice trainer. Perhaps he was not able to appreciate his novice status or indeed the similar status of his VDP.

Tacit knowledge

Some trainers, particularly those who were demonstrating attributes of expertise in their training, were frustrated by not being able to find a way to explain what they were doing. Essentially, as Ryle[9] says, they had forgotten the original rules, and they were having difficulty making their tacit knowledge explicit.

Interestingly, one inexperienced trainer specifically noted that because he was still developing his own clinical skills, he felt this helped his teaching:

'It's nice to be asked. You question what you are doing. You no longer do it on automatic. I ask myself, how am I doing this?'

This trainer had yet to progress as a clinician to the stage where the original rules had been forgotten, or if he had, he was aware that to teach effectively he had to go back and search for those original rules. His inexperience as a clinician was a major factor in his ability to make his tacit knowledge explicit, and this evidence perhaps places him well beyond novice in his training status.

DISCUSSION

Managing the VDP

Selecting the 'right' VDP seems to be the key to a successful year. But the right VDP is not necessarily the best one in academic terms. The VDP has to fit in – become part of the family. Moreover the VDP must also feel that s/he is joining the right family.

Achieving this is not easy; it was no accident that the most experienced, we suggest expert, trainers never put less than maximum effort into the selection process.

Again, we suggest that the teachers who always ensured that the VDP had a nurse, and an experienced nurse, were exhibiting an attribute of training expertise. These trainers were aware that they were not always able to monitor what was happening in a VDP's surgery – but the VDP's nurse was.

Benner[16] in fact talks of the diagnostic and monitoring function of the expert nurse, a nurse who can provide an early warning of a deteriorating situation. The critical point here is that the expert nurse can pick up on subtle signs or changes that an inexpert VDP may fail to recognise.

Gibson's comments[2] about the PDP are perhaps valid. It was not used properly by most of the trainers. The admittedly few expert trainers who used the PDP effectively based the entire teaching year around it. They did not seem to think that a formal dimension to assessment was necessary. Appropriate training in the use of the PDP, and a commitment to its use could be all that is necessary to put what is essentially a sound assessment procedure back on track. But it is

difficult to argue with Gibson that used as it is, the PDP is inadequate as a useful method of assessment.

There were many factors that influenced the outcome of the year. Returning to Dreyfus and Dreyfus,[15] trainers who viewed VT holistically, and could see what was important in a situation (attributes of proficient) and those who had a clear vision of what was possible (expert), were able to create an atmosphere conducive to professional development. It is perhaps significant that in their approach to teaching, the trainers who made the VDPs take the lead and/or assume responsibility for their own teaching, had a mean teaching experience of eight years.

However, these trainers never allowed the tutorial sessions to lapse; they continued them right to the end of VT. They used the tutorials to good effect, but towards the end of the year these expert trainers often allowed the tutorial sessions to become more reflective in nature.

When a relationship develops along these lines it is likely to be a very positive one. From our observations and discussions, confirming Gibson's[2] comments, we became convinced that the trainer's first year is the most difficult. We saw first year trainers who were showing attributes that placed them way beyond novice, but as we have seen, not all were so successful. At this stage the trainer is new, unsure of what to expect of VT. S/he may dislike training and never train again, but a VDP has to go through that experience with the trainer.

We specifically outlined this concern to one of the participants – an adviser/trainer. He noted that he actively kept a close eye on new trainers – as did most of his adviser peers. He recognised that some 'serial' trainers were not the best in the world, but they were safe – they were perhaps competent or proficient. They could be trusted with the care of the new VDP, even if their expertise did not quite parallel their experience. He pointed out that not everyone can be expert.

The expert trainer

It was in fact quite clear that in the context of training, expertise and experience were not synonymous. Jarvis[18] reminds us not to view the transition from novice to expert as a natural progression. If it were, every practitioner would become expert, given sufficient time, and as the trainer/adviser recognised, this was not always the case. However, the converse could also be true. Inexperienced but hardly novice trainers were demonstrating at least some of the attributes of expertise.

The trainers exhibiting the attributes of expert were demonstrably more at ease in their role than their less expert peers. They were far less likely to maintain tight control of the year. They were able to stand back and give the VDP space; not an easy task when the trainer is personally responsible for the VDP's clinical practice. They had a complete picture of VT and what is meant to and likely to happen. The degree and rate of reduction in a trainer's clinical support of his/her VDP as the year progresses is dependent on many factors, the most important being the respective clinical and training expertise of the VDP and trainer. A critical attribute of training expertise appears to be the ability to skilfully judge the degree and rate of that reduction.

Benner[16] sees experience as an essential prerequisite for the development of expertise, but for her:

'Experience ... does not refer to the mere passing of time or longevity. Rather it is the refinement of preconceived notions and theory through encounters with many actual practical situations, that add nuances or shades of differences to theory (p 36).'

We suggest that some of the more inexperienced trainers who seem to progress rapidly in the development of their expertise are making full use of, and critically reflecting upon, the (limited) situations that they have actually encountered. We have noted that the proficient or expert trainer develops an atmosphere that is likely to enhance the relationship. It is worth noting that the trainers exhibiting the attributes of training expertise were also the ones who took time to select a VDP who could fit in to the culture of the training practice. The expert trainers because of their very status were able to select the 'best' VDPs. The paradox is that these trainers are the ones who have the skills to successfully manage the less able VDPs.

Recognising, valuing and harnessing expertise

A new trainer is appointed and as Gibson[2] notes, s/he has limited preparation before embarking on his/her first training experience. S/he is unlikely to have previously had the opportunity of working with a newly qualified practitioner, so expectations of performance are bound to be very variable. The trainer has the new experience of having constant interruptions and requests for help, while trying to manage his/her own practice of patients – life as a trainer is very different from that of a general dental practitioner. Some love every second of it, they learn to step back and let go; they will stay in VT for good and they see it as a valuable aspect of their own professional development. And they appreciate that they are working with novices. As one relatively inexperienced trainer remarked:

'Some of the trainers say that they [VDPs] *are awful clinically, but we're very happy. They're not that bad...'*

We have seen that advisers are aware that those in the first year are new and need support and expert advisers provide significant and appropriate support at this time. This support and/or intervention are crucially important for the new trainer. A critical skill for the adviser is to read the situation and as new trainer training skills develop adjust that intervention accordingly.

An opportunity

VT has an opportunity. There are some trainers who would like to take a short break from VT but as competition for training places increases, they fear that if they do so, they will be unable to return. If such sabbaticals were possible, during that time out, as one trainer, perhaps the most expert of all suggested, a trainer could act as a mentor/consultant to more junior or less expert trainers and advise. There is an opportunity here to embrace the concept of the critical companion. We suggest that committed expert trainers are perfect for this role. As critical companions they can give feedback on performance, as suggested by Argyris and Schon,[14] and facilitate trainer progression.

VT advisers keep a watchful eye on inexperienced and/or inexpert trainers, but such additional support could be invaluable. For some time the trainer mentioned in the previous paragraph had in effect taken on the role of critical companion. His expertise was widely recognised by his peers. He noted:

'When they phone you and say that

Table 2 Suggested attributes of expertise in training
Spend time getting to know your short-listed candidates. Your VDP is joining your 'team'. S/he must fit in
Recognise your VDP's level of experience/expertise and adjust your expectations of his/her performance accordingly
Give the VDP ongoing feedback on his/her performance. Always be constructive; maintain his/her enthusiasm
Encourage the VDP to show you the successes as well as the failures. You want to see what they can do as well as what they can't
Show that you value your VDP's opinion. Ask them for advice
Be there to give help and/or advice when it is needed. This must be unconditional
Give your VDP space. You need the confidence to step back, particularly as your VDP progresses
Ensure that the VDP receives good quality nursing and administrative support
An experienced and knowledgeable nurse can teach the VDP a great deal. They are also in a unique position to identify and defuse developing problems
Work through difficult tasks together. Let the VDP do it. Watch and try to deconstruct the particular skill. Ask yourself, 'how am I doing this?'
Keep a dedicated (tutorial) session to the end. Let this session become more reflective as the year progresses. Use it in conjunction with the PDP
The PDP must be seen as an invaluable assessment tool. If you don't value it, your VDP won't
Seek and reflect upon the feedback on your own performance as a trainer.

their VDP is useless and can't do molar endo, you say, that's normal; that doesn't matter. Now how are you going to sort that out? Ask them, what was your molar endo like when you qualified? And above all else, be there on the end of the phone.'

The adviser is effectively the trainers' critical companion, but s/he cannot be everywhere. Moreover there are times when advice and guidance – at a lower level than adviser – is all that is needed, particularly for novice trainers coming to terms with the demands of VT.

Hindsight is a wonderful thing, but if the trainer in the unsuccessful training partnership in this study had had the support of a critical companion, the VT experience could perhaps have been different for both trainer and VDP.

Returning to the notion of the trainer as a role model, Bleakley[19] notes that junior doctors do not simply learn from the consultants they like and respect, they learn to be like them. They also learn not to be like those they do not respect. VDPs construct their professional identity by selecting particular aspects of their trainer's identity and discarding what isn't appropriate. They learn not to do it like that or not to be like that. In this study, it was pleasing to see that the overwhelming majority of the VDPs considered their trainers a very positive role model. They wanted to use their trainers' professional identities to shape their own. Significantly this finding runs contrary to the earlier work of Baldwin *et al.*[5] and Ralph *et al.*[6] and would suggest that training in VT is continuing to improve and Gibson's[2] concern about trainers being able to develop a sound learning environment, at least for those in this study, is unfounded.

The fact that every VDP saw VT ultimately as a positive experience, suggests that perhaps the structure of VT, as a learning Community of Practice,[20] is very successful. Expert trainers are themselves positive role models for their less expert colleagues and this must be a key factor in making the Community of VT a success. This expertise must be harnessed and not lost to VT.

Charting the path to expert

Trainers undergo a skills progression in parallel with their VDPs and we suggest that this work has highlighted the fact that trainer expertise is a significant influence on the VT experience. We have also indicated that there are particular features or attributes that signpost success in VT and place a trainer toward the expert end of the skills acquisition model. Furthermore we suggested that it is easier to identify these attributes than it is the expert him/herself. Dreyfus and Dreyfus[15] remind us that:

'An individual will be at the same time expert with respect to certain types of problems in his area of skill, but less skilled with respect to others (p 20).'

Based on the analysis of the attributes exhibited by the trainers in this study, we present the list of recommendations/suggestions in Table 2 as a working model, a guiding path that any trainer can use to develop his/her expertise. This is not a definitive account, it is simply a list of some of the attributes that expert trainers exhibit, attributes that point to success in the management of VT.

We would like to thank all the trainers and VDPs who participated in this work. Despite the time consuming nature of the study, not one declined to participate. It was a pleasure working with them.

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