

# Mentoring and Personal Development Planning in Postgraduate Dental Education: A Review

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**Abstract:** Mentoring and Personal Development Plans (PDPs) are educational tools that have been piloted in postgraduate medical education in recent years. Along with another educational tool, performance appraisal, they have been introduced nationally as part of the recent General Medical Practitioner contract of April 2003. In the light of the compulsory Continuing Professional Development and Lifelong Learning Schemes introduced recently by the General Dental Council for all dentists, mentoring and PDPs will surely have important roles to play in postgraduate dental education in the future. This article reviews the roles that mentoring and PDPs have played in postgraduate education recently.

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**Clinical Relevance:** The use of a mentor and/or a PDP can help a dental practitioner to update his/her skills and knowledge with consequent benefit to the standard of patient care that s/he subsequently provides.

According to Homer, from Greek mythology, the original Mentor was a wise and trusted counsellor.<sup>1,2</sup> Odysseus, King of Ithaca, was about to embark on the Trojan wars and asked his faithful friend Alimus if his son Mentor could act as a role model, wise counsellor and trusted adviser to his own son Telemachus while he was away as the boy made the transition from childhood to King.

A more modern definition of mentoring is given by Freeman quoting Carmin as 'a complex interactive process which incorporates interpersonal or psychosocial development, career and/or educational development.'<sup>2,3</sup>

Pietroni and Palmer list the following as being potential roles for a mentor –

father figure, teacher, facilitator, coach, counsellor, sponsor, challenger, guardian, role model and educational supervisor.<sup>1</sup> In the fields of medical and dental postgraduate education, a mentor may play all the above roles to some extent, but the most prominent role will usually be that of a facilitator, helping the mentee to recognize and address his/her educational and learning needs. Pietroni and Palmer also classify three different approaches to mentoring:<sup>1</sup>

- Classical or informal – takes place between two individuals and can be long-lasting. It is not organization-based as here the mentoring process is arranged and managed by the mentor and mentee themselves.
- Contract or formal – organization-based with the mentor either assigned to the mentee (person being mentored) or picked from a 'mentor pool' by the mentee. The

role is defined by the aims of the programme and the relationship generally lasts up to two years.

- Pseudomentoring – involves the provision of support for a specific task, for example the production of a university degree thesis. This form generally lasts for less than 12 months.

A Personal Development Plan describes how and why a person will develop his/her skills, knowledge and outlook over a period of time.

The aims of this paper are to review the role of the mentor in postgraduate education and to explore the use of mentoring and personal development planning in the postgraduate education of general dental practitioners (GDPs) working within the National Health Service (NHS).

## MENTORING IN THE WORKPLACE

### Commerce/Business

Hale states, 'many organisations are turning to mentoring as a way of supporting the continuing professional development of managers'.<sup>4</sup> His article reports the results of an evaluation of the mentoring scheme implemented in 1996 by the utility organization Scottish Hydro-Electric. This evaluation involved interviewing the mentors and mentees participating in this scheme. Key facts to emerge from this study included the importance of:

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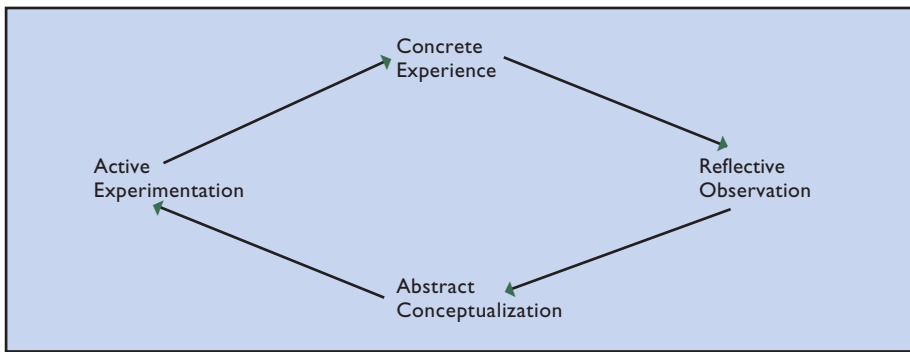


Figure 1. Kolb's Learning Cycle.

- The mentor being outside of the line management relationship;
- The mentor listening first to the thoughts of the mentee;
- The relationship being conducted in a spirit of openness;
- Making sufficient time available;
- Meetings being on 'neutral territory';
- The relationship having a finite life-span, usually between 6 and 18 months; and
- The compatibility of ideas between the mentor and the mentee.

Freeman concludes, 'mentors in business intervene in the external organisational system to open doors which advance careers' and that mentors are 'commonly powerful and influential figures'.<sup>2</sup> In business the mentor actively intervenes on behalf of his/her protégé with regard to appropriate career moves.

**Nursing**

Freeman reports that mentoring is also an established activity in nursing education.<sup>2</sup> From an overview of the literature she concludes that mentors should have professional competence and show:

- 'warmth, empathy and facilitation;
- non-judgmental acceptance, with a positive regard for others;
- insight and tolerance; and
- the ability to confront and challenge appropriately'.

This is emphasizing the pastoral and

befriending aspects of being a mentor.

**FROM THEORY TO PRACTICE**

In order to understand better how to use the educational tools of mentoring and PDPs, we need to explore the process of learning. The following three concepts are particularly relevant.

**Reflection**

Reflection is an essential part of learning. Cowan writes:<sup>5</sup>

*Learners are reflecting, in an educational sense, when they analyse or evaluate one or more personal experiences, and attempt to generalise from that thinking. They do this so that, in the future, they will be more skilful or better informed or more effective, than they have been in the past.*

Further:

*Reflection often involves me in*

*thinking about how I did something – which is analytical. It can also involve me in thinking about how well I have done something – which is evaluative.*

Schon proposes that we use 'knowing-in-action' and 'reflect-in-action' whilst performing a task and then 'reflect-on-action' having performed it.<sup>6</sup> In the dental context, the mentor and mentee can 'reflect-on-action' after treatment has been provided but, unless they are working in practice together, are unlikely to be able to 'reflect-in-action'. Therefore, one of the key roles of the mentor is to help the mentee to reflect on his/her past experience, in order to facilitate the planning of his/her future education. Particular regard should be taken to areas where the outcome and/or performance was/were disappointing so that these weaknesses can be addressed as a matter of urgency.

**Experiential Learning**

Rogers identified two types of learning:<sup>7</sup>

- Cognitive – for example, rote learning of multiplication tables and
- Experiential – for example, learning about an engine in order to be able to repair a car.

Experiential Learning Theory emphasizes the central role played by experience in the way we learn.<sup>8</sup> One of the principles of Rogers' Theory is that significant learning occurs when the topic is relevant to the personal interests of the

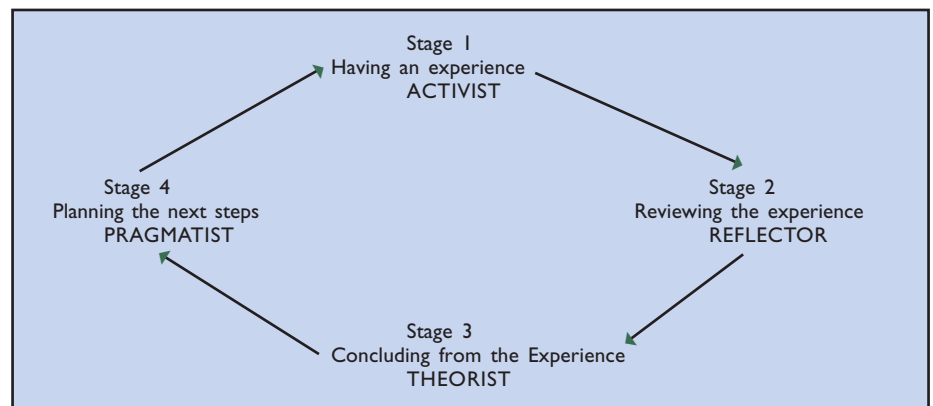


Figure 2. Honey and Mumford's Learning Styles Cycle.

learner.

Kolb has produced a learning cycle linked to experiential learning which has four dimensions as in Figure 1.<sup>9</sup>

This is described by Gibson as:<sup>8</sup>

*A learner's immersion in a concrete experience, followed by observations and reflections, which are superseded by logically shaped abstract concepts and generalisations and finally the empirical testing of the implications of concepts in new situations. This in turn gives rise to new experiences that start the learning cycle again at a greater level of complexity.*

Again the mentor has a key role to play in facilitating the mentee through this cycle.

### Learning Styles

Everyone has preferred ways of learning, termed a learning style, developed as they mature. Honey and Mumford have categorized four learning styles and have transposed them onto Kolb's learning cycle.<sup>10</sup> The categories are activist, reflector, theorist and pragmatist, as in Figure 2.

They have also further developed a questionnaire designed to show which of these four learning styles a person prefers. When helping to develop a PDP with a mentee the mentor needs to appreciate which of the learning styles will suit the particular mentee. In brief, activists like to have problems to solve, the reflectors need time to reflect, the theorists need time to analyse and the pragmatists like to be presented with problems to solve that are related to their work. For example, a hands-on course or a small group informal seminar-style course would suit the activists and pragmatists, whereas a more formal lecture-style would be preferred by the reflectors and theorists. Some educational delivery formats can be tailored to suit any of the preferred learning styles, for example, a computer-aided learning course can incorporate problem-solving, sections of theory and the learner can take breaks for reflection as s/he wishes. By discussing these

preferences with the mentee and taking them into consideration, the mentor can help the mentee devise a PDP that will be more effective in delivering educational benefit to the particular mentee.

### MENTORING IN POSTGRADUATE MEDICAL EDUCATION (PGME).

Mentoring has been introduced into PGME in recent years. Burton summarizes that mentors help mentees to 'develop self in terms of knowledge, skills, values and an ethical perspective' and to 'develop strategies for plotting a course through (professional) life'. He concludes, 'mentoring for GPs (General Practitioners) has proved to be popular with, and helpful to, GPs'.<sup>11</sup> Mentoring is essentially one-to-one peer support where the mentee is able to discuss both professional and personal issues with the mentor.<sup>12</sup> Self-directed learning is prevalent in the GP Vocational Training scheme with the Trainers providing a supportive framework for the Trainees. They can develop close working relationships that may continue once the trainee year has been completed with the mentoring aspect to the fore.

Mentoring projects in General Medical Practice have been set up in recent years to differing specifications and subsequently evaluated. Freeman describes The South Thames (West) Mentor Project and emphasizes the pastoral dimension that distinguishes mentoring from training, managing and supervision.<sup>13</sup> She also explains the importance of training for mentors and the setting up of support groups for mentors.

The concept of co-mentoring (or co-tutoring) in which the roles of the mentor (tutor) and mentee (tutee) are mutual such that while one 'talks' the other 'actively listens' is discussed by Sackin *et al.*<sup>13</sup> They state 'in keeping with the principles of adult learning co-mentoring pairs (or sometimes trios) set their own agenda in terms of the content, frequency and nature of the meetings'. The listener does not offer solutions but attempts to enable the

'talker' to find his/her own solution – in line with the principles of counselling. Sackin *et al.* describe this method as providing 'a supportive base to facilitate learning in areas ranging from personal development to academic enquiry'.<sup>13</sup> Pairs of GPs of similar levels of experience co-mentor each other to devise an educational plan, provide support and review learning outcomes. The scheme was evaluated and the main disadvantage was perceived to be that colleagues of similar professional experience would have welcomed a more experienced colleague to help guide their learning.

Hibble and Berrington evaluated both the mentoring and co-mentoring schemes for GPs in the Anglia Region.<sup>14</sup> A separate group of GPs who were not involved in either mentoring or co-mentoring was also interviewed for comparison. The results of this study showed very high levels of acceptability by the participants and a reduction in stress levels since joining the project in both the mentoring and co-mentoring groups. Those in the mentoring group were invited to describe the style of the mentoring and did so as 'informal, non-directive, insightful, supportive, relaxed, informative and non-threatening'.

Furney *et al.* describe another example of the use of mentoring in medical education. Their study involved residents in an American hospital who were acting as mentors to interns and students when case presentation skills were being learnt.<sup>15</sup>

Therefore, it can be concluded that mentoring is an important and useful technique in PGME.

### PERSONAL DEVELOPMENT PLANS IN PGME

Hibble and Berrington state that 'in the modern world of medicine knowledge increases rapidly and practice systems change continually'.<sup>14</sup> It is therefore essential that clinicians keep up-to-date with their own and other specialties. This self-directed learning can be facilitated by having a Personal (professional) Development (or learning) Plan (PDP). Owned by the GP, this plan

describes how and why s/he will develop his/her skills, knowledge and outlook over a period of time. The success or otherwise of this plan is reviewed at the end of this period of time. Where a practice has more than one GP, the concept can be extended to produce a Practice Professional Development Plan (PPDP).

The initial step in the production of a PDP is to identify the educational/learning needs and then devise a way of correcting this discrepancy. A mentor can be used to facilitate this process and, according to Gallen and Buckle,<sup>16</sup> this has benefits that include:

- 'allowing for the discussion of educational needs, that is, raising the profile of an issue;
- giving a 'second opinion' on what is needed; not just a GP selecting to study his areas of interest or preferred topics and
- highlighting areas in which the GP feels that s/he is strong but has actually fallen behind'.<sup>16</sup>

Having identified these needs, their nature and cause should be examined and priorities set for further action. This process may also identify underperforming GPs.

In their study, Hibble and Berrington found that personal learning plans were developed more often in the GP groups that were either mentored or co-mentored than in the GP group that was neither mentored nor co-mentored.<sup>14</sup>

### Personal Development (or Learning) Portfolio

Another educational tool that can be used in the learning process is the portfolio.<sup>1</sup> This is a collection of all that the learner has experienced during a period of educational activity and would include items such as personal notes, handouts, reading material, videos, workload logs, critical incident analyses and reflections. The importance of reflection in learning is stressed by Pietroni and Palmer.<sup>1</sup> This reflection is facilitated by the keeping of a portfolio and by the involvement of a mentor.<sup>8</sup>

The portfolio-learning process starts with the GP identifying and describing an experience at work or in his/her personal life to the mentor. Using a process of facilitated reflection, the experience is evaluated and a way forward is planned. The learning needs and educational plan are written down to produce the PDP. This self-assessment process may also be externally assessed for accreditation purposes<sup>1,8</sup>

Pietroni and Palmer summarize the portfolio approach as giving 'the learner the major responsibility for planning, managing and evaluating the learning but allows flexibility with regard to the individual learner's pace and style.' They also conclude that this 'learner-centred and owned education fits in well with principles of adult learning, emphasis on workplace learning and reflection'.<sup>1</sup>

The personal development (or learning) portfolio is therefore different from, but can be integral to, the updating of the PDP. In summary, when a period of educational activity proposed on the PDP has been completed and documented in a portfolio, the learner can use the portfolio to reflect on that period with a mentor and update his/her PDP.

Therefore, it can be seen that the use of a mentor to facilitate the PDP of a GP is beneficial. As annual appraisals are introduced for all health professionals, the use of mentoring and PDPs is likely to become more widespread to help these professionals reflect on their needs and the best way to address them.

### THE GENERAL DENTAL SERVICES

The use of mentoring and personal development plans in the General Dental Services is in its infancy. Pilot studies in Wales, Staffordshire (West Midlands) and Scotland organized by their respective Regional Postgraduate Deaneries and an initiative in East Lancashire are in the vanguard.

#### Wales

A scheme involving 12 GDPs in South Powys has been piloted recently. These

GDPs had a variety of backgrounds representative of a cross-section of the profession and were interviewed in their practices to obtain their opinions on postgraduate education and the use of PDPs. The results of this pilot scheme were reported internally. The Wales Deanery has recently appointed three Continuing Professional Development (CPD) Tutors to cover the whole of Wales. The role of these Tutors is to mentor an initial group of volunteers helping them to develop their own PDP. It is intended subsequently to open this scheme to all GDPs in Wales. However, the scheme is not mandatory as the organizers are aware that not all GDPs will wish to avail themselves of assistance in developing a PDP. The keystone to the Welsh scheme is that the information gathered during mentoring by the CPD Tutors will be passed on to the local Postgraduate Dental Tutors to help them to devise an educational programme in their local Postgraduate Centre to meet the needs of the GDPs in their area.

#### Staffordshire

The Staffordshire pilot scheme involved four experienced GDPs each mentoring a group of 10–12 local GDPs by helping them to formulate a PDP. The mentor would visit each GDP individually at the GDP's practice to facilitate this process and then follow-up with a telephone call at an agreed later date. Subsequent follow-up visits were available at the request of the GDP. A variety of sizes of dental practices were involved, ranging from single-handed to a practice having four GDPs. The results of this pilot study are in the process of being analysed by a team from the University of Birmingham prior to being made available to all GDPs in the West Midlands to help them formulate their own PDP. Further pilot schemes involving mentored PDPs are being planned in the West Midlands in collaboration with local Primary Care Trusts (PCTs).

#### Scotland

Walker *et al.* reported on the



Category	Learning Need Identified	Timing	How	Review
Clinical knowledge update	Treatment of toothwear	Within next 6 months	Educational course	12 months
Clinical skills update	Molar Endodontics	Within next 4 months	1. Hands-on course 2. CAL programs	6 months
Peer review / Clinical Audit	Quality of radiographs	Over next 6 weeks	In practice	Annual
Personal development of special interest	Develop skills in oral surgery	Next 2 years	Seek clinical attachment in oral surgery	On-going
Attainment of further qualifications	General clinical educational advancement	Next 2 years	Undertake MF(GDP).	On-going

Table 1. Example of Personal Development Plan (PDP).

organization and management of two pilot projects in Scotland whose aim was to give those GDPs who participated a personal learning plan (PLP) for a year.<sup>17</sup> One of the projects took place in an urban area based at a Postgraduate Centre and the other in a rural setting distant from such a facility. For the urban project, local GDPs were initially sent a questionnaire to find out about their previous postgraduate activity and preferred learning styles and to assess their individual learning needs. The information received from these questionnaires was collated and the participants given a 'menu' of the most-requested subjects, both clinical and non-clinical, to choose from to formulate their PLP. No mentoring was involved for this group. For the rural project, an initial questionnaire was sent and then was followed up with a 'semi-structured interview'. Therefore, there would have been potential for mentoring to occur at this interview. The information from these two sources was then collated to produce a PLP for each GDP. Educational events were organized for the most-requested subjects for both groups; videos, CAL programs and free use of library facilities were also provided.

These projects were evaluated by Carrotte *et al.*<sup>18</sup> The 70 participants (43 urban and 27 rural) completed two questionnaires, one during the project and the other after the project. In addition, some of the participants were interviewed: 91% of the urban GDPs and 85% of the rural GDPs participating thought that producing a PLP had advantages over selecting courses from

the 'section 63 programme'. Overall, Carrotte *et al.* concluded that:

*...if postgraduate dental education is tailored to the individual needs of the participant, it results in a perceived improvement in patient care.*<sup>18</sup>

### East Lancashire

The Consultant in Dental Public Health and the Local Dental Committee in East Lancashire have collaborated to develop a local scheme, similar to that being set up for GPs, to help GDPs whose performance is causing concern.<sup>19</sup> This scheme has been accepted by the Local Health Authority and includes lay membership. One of the key elements of this scheme is the mentoring support offered to underperforming GDPs. A pool of suitably qualified dental practitioners, for example the Dental Practice Advisor and the Postgraduate Tutor trained in mentoring skills, is available from which the GDP can choose. The intervention or 'action plan' in this scheme can be in three different forms, educational, health and organizational/administrative, depending on the area(s) of under performance highlighted. Mentoring is involved in all three of these types of intervention. For the educational aspect of any intervention, the role of the mentor will be to help and encourage the GDP to develop a personal learning plan, provide on-going support and review progress as the action plan is implemented. The mentor will also act as a link to local educationalists, prepare the GDP for the reassessment visit(s) and, in very serious

cases following a Hearing at the General Dental Council (GDC), help to supervise corrective action. The emphasis of this scheme is on underperforming GDPs and a 'contract' is signed by the GDP and held by the Dental Performance and Assessment Group who administer the scheme. The mentor may be required, in some cases, to provide a separate report to this Group about the GDP.

### Peer Review and Clinical Audit

This scheme requires every GDP to have participated in either a Peer Review project or undertaken a Clinical Audit in the 3-year period from April 2001 to March 2004. This is a Terms of Service requirement and funding for 15 hours of such activity is available for every GDP. Clinical Audit Advisors and Facilitators have been appointed and Regional Administrator support has been organized. Part of the role of the Facilitator is to act as a mentor to the GDP in the scheme by giving advice on the suitability of a proposed topic to be peer reviewed or audited and subsequent help as the project progresses. The Facilitators receive initial and follow-up training for their role and are all experienced, having completed at least one peer review project and one clinical audit.

### PERSONAL DEVELOPMENT PLANS

When putting together a PDP it is, in the author's experience, helpful to break down the identified learning needs into

Aim	Specific Objectives	How	Involves	Review
Employ a VDP	1. Equip surgery 2. Develop interview skills 3. Research VT requirements	Educational course  Consult local VT Trainer and Advisor	GDP(s), dental nurse(s) and practice manager	3 months
Clinical Audit	Quality of radiographs	Over next 6 weeks	GDP and dental nurse(s)	Annual
Update CPR Training for whole dental team	Maintain effective management of a medical emergency	1. Paramedic-led training session 2. In-house practice sessions	All members of the dental team	Annual 6-weekly
Improve dental nurse qualifications	NVQ in dental nursing training	Local course over appropriate time, day-release	Trainee dental nurses	On-going

**Table 2.** Example of Practice Professional Development Plan.

specific categories for consideration, as illustrated in Table 1.

It is essential to calculate the time commitment involved in the various activities under consideration. If a major project is being planned, for example attaining a qualification such as MF(GDP), then little time may remain for other activities. It is important to be realistic about the time needed to put together any necessary clinical casework and background reading for such a project. The colleague who is mentoring the PDP can facilitate in this regard. S/he may need to involve another colleague as a specific mentor for this project, possibly a colleague who has recently attained the particular qualification.

It is essential to reflect on the PDP with the mentor on an annual basis and amend it as appropriate. Some ongoing projects will of course remain on the PDP for more than one year. In the author's experience, it is beneficial to have a mini-review with the mentor after six months (or other time period as appropriate) as life and circumstances can change rapidly. For GDPs their PDP will be linked to their practice and therefore linked to their practice professional development plan (PPDP). Therefore, several items will appear on both the PDP and the PPDP. The involvement of one or more of the dental team will be integral to the majority of items in a PPDP. All staff members should be involved in the production of the final PPDP and keep a copy of the document for reference. In this way, they all have 'ownership' of the plan and can clearly see their role in the

development of the practice. An example of items that may be included in a PPDP is shown in Table 2. Therefore, it can be seen that mentoring, PDPs and PPDPs are linked together very closely.

## KEY ISSUES

### One-to-one Mentoring

In the mentoring schemes described above, each mentee has a specific individual mentor. A mentor may have several mentees and trainees under his/her wing at any one time but the total number should be manageable so that there is not a detrimental effect on the mentor's own work. In the schemes discussed earlier in this paper, with the possible exception of some of the GP Trainee schemes, the mentor is outside of the mentee's line manager relationship.

### Confidentiality

Issues that are discussed between the mentor and the mentee should be confidential in order that trust, openness and honesty can be established between the two. In exceptional circumstances, an issue may be so serious that the mentor may have to report to another person and, in extreme cases, to the GDC. Section 2.4 of *Maintaining Standards – Guidance to Dentists on Professional and Personal Conduct* published and issued by the GDC to all registered dentists in May 1999 states:

*A dentist must act to protect patients when there is reason to believe that they are threatened by a colleague's conduct, performance or health. The safety of patients must come first at all times and should over-ride personal and professional loyalties. As soon as a dentist becomes aware of any situation which puts patients at risk, the matter should be discussed with a senior colleague or appropriate professional body.*

Therefore, rarely, this report may be made without informing or obtaining the consent of the mentee. The keeping of confidentiality, except in the extreme case, is crucial to the success of the mentor-mentee relationship.

### Perceived Barriers

Gibson considers that the 'perceived barriers to the successful introduction of Personal Development Portfolios include:

- A requirement for honesty;
- The need to make difficult decisions in the light of difficult discoveries;
- The enforcement of uncertainty'.<sup>8</sup>

These apply to PDPs and part of the role of the mentor is to counter these problems successfully if they arise.

## CONCLUSIONS AND THE FUTURE

- The use of mentoring and PDPs is only just beginning to be introduced into postgraduate dental

education (PGDE), with the pilot schemes in Wales, Staffordshire, Scotland and East Lancashire. These schemes are not yet of sufficient size or duration to be able to determine whether or not they represent best practice.

- As can be seen from this review, mentoring has previously been used by other professions and, when evaluated, has proved to be beneficial. PDPs are also finding a place in PGME. Therefore, it would appear to be reasonable to presume that mentoring and PDPs will be introduced in some form across the NHS GDS in the near future. The advantages of this would be in helping to improve the standards of both those GDPs that are performing well and those that are underperforming.
- The introduction of a scheme for all GDPs would require financing, together with the recruiting and training of mentors and administrators.<sup>8</sup> The trainers would also require the support of educationalists. These same issues have been successfully addressed in the Peer Review and Clinical Audit scheme introduced in 2001.
- One of the major strengths of mentoring is its flexibility. This allows it to be tailored to an individual situation. The emphasis can be put on any of the different roles that a mentor can utilize as previously listed by Pietroni and Palmer contributing to this versatility. The regularity and the level of formality of the meetings between mentor and mentee can be adjusted to suit the individuals involved. Therefore, the process is 'mentee-owned and driven'.
- Some GDPs may not want to be mentored or have a PDP, but the vast majority are likely to accept some help and advice towards enhancing their learning and improving the standards of their patient care and practice.
- Many GDPs can feel isolated, particularly the full-time, single-handed practitioner who spends all

his/her working life in his/her surgery. These individuals can easily become demotivated and fail to keep their learning up-to-date.<sup>20</sup>

- Other examples of the currently expanding role of mentoring in PGDE are the identification of GDPs willing to act as mentors for refugee dentists within the West Midlands and the appointing of a mentor by the Faculty of GDPs (UK) to help participants with the clinical component of a new course leading to the Diploma in Implant Dentistry.
- Further pilot studies evaluating the use of mentoring and personal development planning in PGDE are indicated. Subsequently, a substantive scheme could be introduced. It will be necessary to give such a scheme definition and structure in order for it to be productive. This should take the form of protocols and guidelines, together with suitable management of the scheme.

In this paper, the roles that mentoring and Personal Development Plans play in postgraduate dental education have been reviewed and the potentially interesting and exciting future for these educational tools in this field has been explored.

#### ACKNOWLEDGEMENT

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## LETTERS

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