# **DESIGN FOR LEARNING**

A Report on 'Teaching Methods' used in the weekly Study Day of the Pilot Vocational Training Scheme for newly qualified dentists

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#### **INTRODUCTION**

This report is a summary of observations and interpretations of many of the activities of the first year of the Pilot Vocational Training Scheme. In it I have tried to distil out what seemed to me to be the most important pointers toward the future. I have aimed this paper primarily at providing formative evaluation; that is, information and ideas which may be helpful in getting the second year of the Scheme designed. In this way I think we can build on the obvious strength and successes of the first trial. I have also tried to put together some ideas which may be helpful to the organisers of future schemes.

I take as my major direction to any course organiser or teacher that they should provide structure for learning. This structure is in both the content and in the process. By content I mean the new information which is being presented, the values which are being discussed, the skills which are being practised, the specific problems which are being solved. By process I mean the series of steps through which the group is being helped in order to achieve the various ends which they have set themselves; such as lecture or demonstration from an expert or from the PGAs<sup>†</sup> themselves, dialogue, discussion, structured problem-solving session, skills practices, role-play or self-directed reading. (A summary list will be found in Appendix 1, in which I have attempted to match different teaching methods with different areas of skill.)

All such learning structure will have both content and process and will be designed to meet some specific or general educational need. It is not always obvious which type of design is most appropriate. For example, a lecture from an expert may not be the most appropriate way for the group to acquire new information and likewise a structured problem-solving group may not be the best way to help individuals meet a specific concern arising out of their practice.

I am organising this paper by looking at what I understand to be:

- some of the factors affecting teachers' choices and emphases in the first year
- the problem of finding the right balance of methods which will further knowledge, attitudes and skills
- the problem of balance in different areas of content
- the particular strength of the vocational training course and what this means for methods, especially those which enhance the complementary strengths of practice and study days
- how far the PGAs can help design the course and the gross structuring of the course the implications for teacher training.

<sup>†</sup> Note: Students of the course had the designation Postgraduate Associates, shortened to PGA in this paper.

## FACTORS INFLUENCING TEACHER ACTIVITIES

#### I Wealth of Experience

I fully understand the concern of the very experienced practitioners to transfer the insights which they have gained in twenty or more years to those much younger than themselves and the excitement of being involved in the Scheme, shown by so many. To attempt this in thirty days or so must be seen however as an impossible task. It was only through their long years of experience that they acquired those insights. The job of the course is to accelerate this process but there are limits to the rate at which this can be done even with the most appropriate methods. The tendency to attempt this, if unchecked, will lead and has led to an excessive amount of information being presented and to a more prescriptive and confronting style of interacting. It will also lessen or remove any emphasis on the following: helping the group find out; to struggle with relating new ideas to their own experience; to solve problems; to be self-directed in their own learning processes and hence to make more use of their own experience. In this way, the teacher will find it more difficult to be fully supportive in this process, allowing members of the group to take pride in the successes of their developing experience.

Whilst there will inevitably be many times when it is perfectly appropriate for experienced practitioners to present their wealth of experience to the group, a limitation to the didactic approach may well be seen in the existence of concern amongst senior members of the profession about the high proportion of practitioners who do little to further their own development, a concern which is expressed in other professions. The authoritative mode of teaching *tends* to foster the dependence of the learner on the teacher rather than their independence. Teaching methods which encourage independence in thinking, studying, problem-solving and acting, are essential to life-long personal and professional development. What needs to be found is an appropriate balance between the more authoritative and the more facilitative methods.

#### II The Course as a Showpiece

I fully understand that much of the success of the new course will depend on its acceptance by members of the profession after their examination and critical assessment of the published programme. There is therefore understandably a tendency to emphasise the content of the programme in presenting the new course in terms familiar to members of the profession. This carries over inevitably to teachers who emphasise the content rather than the process. As this observation can be applied to most courses in the country, it should not be taken as a special criticism of the first pilot course. In any case, many sessions were labelled according to process; for example, problem-solving session, discussion, practical exercise, lecture, short talk, role play.

## III Educational Skills

I fully understand that teachers for the scheme should be largely drawn from among the ranks of experienced professionals. As such they may have little training in being a teacher. It follows that they may not have a wide range of educational skills; they may not understand the subtleties of the learning process and the factors affecting learning and motivation as applied to a group, albeit they are well skilled with individuals. For example, it is all too easy to assume that having given a lucid talk, group members will have fully assimilated and fully understood all that has been said. This assumption will lead the practitioner-teacher to proceed without allowing the PGAs to digest what has been presented, to relate this to what they already know and to their experiénce, or to think out questions where they have not fully grasped an idea or where they have not been able to link the new ideas to their own experience. At its most acute, this has involved several experienced practitioners engaged in discussion amongst themselves and putting pressure on individual members of the course to change their points of view. Whilst listening to such discussion can be helpful, in practice it probably more often interrupts

the learning process of the PGAs rather than helps it. At the other extreme, some superb skills have been shown in some situations by some teachers.

1 PGAs have been taken very carefully through real or hypothetical problems, the teacher concerned constructing questions spontaneously to elicit critical thinking amongst the group to get them to consfder carefully the consequences of various actions, to relate fundamental principles to the situation, to apply ideas to the problem, to debate the underlying issues and to solve problems. One or two practitioners have encouraged small group work on such problems.

2 We had an excellent role-play demonstration which was a focus for discussion. We also had a simulation involving several PGAs as participants.

3 We have had a spontaneous 'application session' as an intuitive P and excellent response to real group needs.

4 We have had problem-solving groups where the process was structured rather than the content, leaving PGAs to.fill in their own content, one being led by a PGA.

5 We have had one short seminar given by a member of the group; all a members presented their projects by seminar.

6 Some of the lecturing has been of outstanding quality in terms of the content, sequence of content, illustration and style. There have been many excellent quality demonstrations too.

# FACTORS AFFECTING COURSE DESIGN

## I Knowledge, Attitudes and Skills

An important problem in any course is how to find exactly the right mix of methods as will enhance the knowledge and the attitudes and the skills of course members. There are many kinds of knowledge: information which is data or facts; concepts, principles, theories; knowledge of procedures; knowledge of values, of the different opinions held by different practitioners, of a variety of strategies and approaches; knowledge about different philosophies.

All this knowledge is to be used, thought about and valued in different ways. It can only therefore be a basis for understanding, attitude development and skills learning. Much of the skills development will in any case be in day-to-day practice in a vocational training course.

It follows that we need a variety of approaches not only designed to ensure that PGAs enhance and develop their knowledge as above but also to enable:

1 Growth in understanding, skills of thinking about specific knowledge, skills of working through specific problems, to find creative solutions, forming judgements of their own.

2 Increasing commitment to the above, motivation to continuously reassess and clarify personal values, action in response to these values, and reorganise their systems of personal values.

3 Consolidation and enhancement of all important practitioner skills of all kinds (discussed in the next section).

There are methods which are primarily directed at one or other of these different sorts of learning.

- The Lecture is primarily directed at learning recall and comprehension of new information of all kinds.
- The Buzz Group is mainly directed at clarification of and comprehension of new ideas.
- Group Discussion is primarily aimed at developing attitudes by inviting participants to state their own value position and be confronted by others presenting alternative value positions and the ensuing debate.
- 'Modelling' an expert and trial and error in different situations are ways of learning skills, hopefully leading to internalisation and the development of flexibility and adaptability.
- Some methods develop more than one of these areas of learning.
- Problem-solving groups help learners apply new ideas to practical solutions.
- They can develop and enhance attitudes by discussion which can be constructed to enhance problem-solving skills themselves.
- Problem-centred work of all kinds can encourage creativity, the making of judgements and development of attitudes.
- Role-play and other psycho-dramatic work encourages skills development and attitude change.
- Case discussion encourages the development of understanding and potentially attitude change. (See appendices for further elaboration)

## II Balance of Content

There are many ways of analysing the content appropriate to the vocational training scheme, as there are many ways of classifying practitioner skills. Whatever analysis is used, there is a need to find the right balance of emphasis as between the different areas of content associated with the different sorts of skills required by the dentist. Following the general line of an earlier paper, I divide the different practitioner skills and personaf skills as follows:

# 1 Technical Skills

- a) Clinical
- b) Managerial (and also related to working in the National Health Service )
- c) Professional (including ethical decision-making, research and working as a member of a profession)

2 *Interpersonal Skills* (including the skills of relating to patient, nurse, colleagues, receptionist and any other, and educational skills)

3 *Personal Skills* (relating to self awareness, self confidence, self -management and self-development )

There is no *a priori* way in which we can assign a percentage weighting to each of these three areas. These skills are not equivalent, indeed they are very different. According to this model, in most situations, each of the three different sorts of skills will be *simultaneously* required. For example, when practitioners carry out a particular technical procedure to meet a particular patient need, they will also be relating to the patient in a variety of ways, and dealing with their own feelings in the situation and in the relationship, learning from the experience. It follows therefore that the balance to be given to training in these different sorts of skills will be determined according to the needs which surface during the course and the values of those organising the course.

In the Pilot Year there was undoubtedly a strong ongoing professional emphasis on ethical practice. The greatest emphasis was placed on: firstly, the technical/clinical skills and, secondly, skills associated

with managing good practice. Overall however there was less emphasis on (a) interpersonal skills, (b) personal skills and (c) general problem-solving skills applicable to all problem situations.

*Interpersonal skills* training has the object of helping individuals to become more aware of, more intentional and creative in their own behaviour, whilst responding caringly to another person. It can include:

- Channels of human communication (e.g. gaze)
- Specific sorts of behaviour (e.g. asking questions)
- Intentions (e.g. supporting)
- Specific relationships or sorts of situations, by re-enacting those situations within the group in appropriate ways, reflecting on and receiving feedback from others about the immediate experience.

*Personal skills* include at least the following:

- a) Management of the dentist's own internal processes in difficult situations. The feelings aroused in difficult circumstances can take attention away from the task and from the patient as an individual and from the dentist-patient relationship into the turbulence within, and this can make aware action more difficult to sustain. These skills can be enhanced in the group, using monodrama and other psycho-dramatic methods as part of interpersonal skills training or within the ongoing group problem-solving process.
- b) Self-directed learning and self-initiated development can be encouraged within the general course process: for example, by seminars; by guided or unsupervised reading; through the whole range of active learning methods described in other parts of this report and in particular by any problem-solving activity which does not lead to a solution, thereby requiring PGAs to

seek and consult sources for relevant information, to be presented to the group in, say, the next study day.

c) Ongoing self-monitoring, self-assessment, goal setting and action planning, rooted in a basis of self-appreciation, can be and have been encouraged by audit, by application sessions, during problem-solving groups and at other times.

*Problem-solving skills*. There are three different sorts of goal which can be achieved by problem-solving methods during the course:

- a) Solving a particular problem
- b) Increasing understanding of that particular area of practice
- c) Enhancing and developing the skills associated with solving problems

Depending on which of these is most important, one or other of the following approaches will be appropriate:

- (a) Teacher suggests the problem
  - (1) Teachers takes the group, stage by stage, carefully through the problem, raising appropriate questions at all stages, inviting the group to consider all aspects of the problem. Their questions may well follow one or other of the problem-solving structures (Appendix 4) but will quite generally be directed toward the content of the problem as well as the process.
  - (2) Small groups of four or five PGAs work on the problem and come up with solutions which will be shared in plenary session.
  - (3) Individuals will work on specific problems which may or May not be shared in the whole group. Certainly their insights into going through the problem will be shared.

(b) Problems generated by the PGAs. These will be those concerns or problems experienced by the PGAs during the course of their normal work and brought into the group for discussion. These can be treated as follows:

- (1) After hearing a description of the problem and questioning the PGA concerned on relevant aspects of the problem, experts gives their answer directly.
- (2) The expert facilitates either the individual or the group, solving the particular problem as described above under as (1)
- (3) After a description of the problem, each member of a small group in turn gives to the PGA concerned their own answer as to what they would do under the same circumstances. Any expert present may well add their own solution. PGAs who brought the problem are invited to react to all that feedback and say what they now thinks they might do.
- (4) An individual or a small group is helped through a problem-solving process or the individual or group works through a problem-solving cycle as Appendix 4.

Specifically, both interpersonal problems and intrapersonal problems may be treated by re-enacting in the group the situation that gave rise to concern. A variety of psycho-dramatic methods are available.

It should be noted that if problem-solving skills require to be developed, then the problem-solving process itself should be reviewed; that is, it is not enough simply to accept that there has been a solution generated by the group. Each step of the process needs to be reviewed to determine the extent to which members of the group think it has contributed to the problem-solving process, and the value

to each member of these steps in the day-to-day problem-solving processes. Thus the skilled teacher will attempt to help PGAs make links between the experiences of the study day and their 'back-home' experiences in the surgery.

#### III Links between the Study Day and the Practice

What may be self-evident in a scheme such as this is the possibility of making links between the study day and the practice. By that I mean that the study day will generate a great many things that PGAs can take to their practice and vice versa, there will be much arising in the course of day-to-day work which the PGA will wish to bring into the study day for a variety of reasons.

*From the study day*, PGAs will bring ideas about methods they can use, new goals they would like to achieve, plans for action to be taken, criteria they would use to assess themselves, questions to answer and research they will carry out in the course of their work in any of the areas under study.

*From their practice* they will bring into the study day problems, issues, concerns and questions. They will also bring data, answers, results and successes.

It is all too easy to forget the need to make links between the study day and practice, and appropriate processes will need to be built into the course to potentiate and strengthen such links

1 PGAs will need to understand and accept ideas presented by experts. In order to do this, they will need time to think about new material, they will need to ask questions to clarify doubts they may have or misunderstandings they may be aware of or uncertain- ties they feel, they will need to challenge and criticise the new ideas as they compare and contrast them with the ideas they have previously learned or the practices which they in fact carry out.

2 They will need to be encouraged to translate the ideas they have been given and that they have shared between them into practical terms. For example, small groups can be invited to decide what they can feasibly put into practice and how they might put it into practice, what they cannot put into practice and why not. These small groups could then report back to the plenary session. Each group could take some different aspect of the day's work, There is no reason why the teacher or course organiser could not take the whole group through each part of the day in terms of its practicability.

3 Each individual in the group can be invited to set goals and determine plans for any action they may have decided; for example, for new or refined procedures, new ways of relating to people, patients and colleagues, experimentally on future occasions. Any of these plans which individuals make can be recorded in notes and referred to on future occasions as they are invited to check back to see how much of what they planned to do, they did in fact carry out. Such action planning and goal setting can be done in pairs or in small groups.

4 Individual goals can include information-seeking activities designed to meet individuals' own needs, as, for example, when at the end of a group problem-solving session the solution to the problem cannot be found and therefore the individual must do some reading of the literature to determine an appropriate answer, Alternatively, individuals may well seek information on behalf of a group, each member of the group having decided to seek a different piece of information to present to the group at a subsequent meeting in a seminar.

5 There is no reason why individuals and groups should not look forward to some form of mini-project in which, for example in management, they could research the way the practice is managed, how finance is arranged, how orders are made, how stock is controlled, what capital is tied up in stock, how patient records are kept, how patients are met in the reception, how their surgeries are designed in detail, how equipment is maintained. Such projects could include the design of algorithms for managing faults in equipment.

6 Individual projects could include self-monitoring and assessment; for example, individuals could carry out some kind of study of the pattern of their own work, of the movements that they make in the surgery, of how they interact with patients, of the standards of their own performance. Some of these have been and will be carried out as part of audit.

There will also be the long project researches in which individuals may combine together in small groups or in which a small group of individuals supports another in gathering data and in experimental activities in which they may, for example, be alert to notice certain sorts of situation or problem in their own practice which will contribute to another individual's project.

7 Past experience of this type of work shows that there needs to be a weekly time set aside for reminders to be made about what people had said they would do. Certainly there needs to be time in which individuals are encouraged to share the results of such work. Such sharing will lead to the generation of new ideas for joint work together and result in much fruitful discussion.

In the other half of the reciprocal relationship between study day and practice, PGAs will bring much to the group from their everyday work.

1 Their work experience will include many examples of success. There will be new procedures tried for the first time or successful on the individual's own criteria for the first time. There will be goals set in the study day or otherwise which have been achieved. These should be shared and celebrated, whatever level of competence is shown by the individual. This is in order to encourage each and every member of the group in their success as a basis for their ongoing personal development. I claim that such development is best approached from a position of strength which this kind of support will encourage.

2 Members will experience many problems in the course of their work, many difficulties which they will bring to the study day. These may be: ethical; legal; about clinical procedures which give rise to difficulty; about the management of their practice; difficulties they are having with certain types of patient or with patients in certain types of situation or difficulties with colleagues. They may be concerns about the feelings which arise in certain circumstances and about the responsibilities which they have undertaken as dentists.

Naturally many problems will already have been solved, by rising to the occasion or by talking it over with the mentor. These should be counted amongst successes. All other problems should be brought to the group for support, encouragement and help in solving and surmounting the difficulties. This has been and can be carried out in two ways: by informal discussion either with experienced dentists present during the study day or amongst peers informally over coffee and lunch; alternatively, such problems can be solved in ways already described, either by group work or by replay.

3 There will be data and information coming from practice to be fed to the group from their own selfmonitoring of particular situations and from the various studies and analyses they may have carried out in their daily work. This can include any of the examples mentioned above under mini-projects in management, and x-rays, treatment plans, models, copies of forms, referral letters, records including day book and accounts (trainer willing). Time will need to be arranged for this information to be shared, whether it is to be fed to individual members of the group, relayed in seminar, shared in discussion as for example in audit, or collated in some form of handouts. In particular, any previous promises, in the form of goals and action plans, should be systematically reported to the group and reviewed. These ongoing checks will ensure maximum transfer of learning from the study day to practice.

# IV Collaboration in Course Design

In any vocational training course or indeed in any other course for experienced practitioners, one important issue which needs to be resolved is the extent to which participants will be involved in the design of the course. Such collaboration, if any, can be at two levels: (1) the gross design of the course and (2) the design of particular sessions in the course. For the former, participants would contribute to the choice of content for various sessions in the course and in respect of the methods to be used in these particular sessions. For the latter, participants might feed forward to course teachers specific questions they want answered, specific information they need, specific demonstrations they would like to see of various clinicalprocedures or practice designs or whatever.

Such collaboration can range from

1 Organisers interpret the needs of participants in making suggestions for future sessions

2 Organisers consult course members about what they are particularly interested in and then making arrangements for appropriate sessions if they sees fit

3 Oganisers facilitate the emergence of a genuine design by the course members of some future sessions by, for example, arranging for small groups to share their concerns and come up with items of content and practice which they would like to have in later sessions in the course

4 A full peer learning community in which course organiser and PGAs together collaboratively come to an agreement on what were appropriate aims for the course (to be kept under review), what methods were appropriate in the course, what resources might beused to meet the various ends and when the various sessions mighttake place.

In the pilot course, the first two methods were used in planning the second and particularly the third term of the course. Additionally there was some reorganisation of particular days in the light of PGA interest.

An optimum method appropriate to the skill of the course organiser, the constraints imposed by the system and the skill and interest of the PGAs themselves will not be easy to specify in advance. My own impression is there was rather more of (1) above than (2) and that it would be more appropriate to have some (1), more (2), even more (3) with at least, for a significant proportion of the course, some of (4). (4) of course implies some sophistication and understanding of the different sorts of methods that are appropriate to the course. Overall, probably some form of compromise in which there was more pre-determined input from the beginning of the course gradually reducing throughout the course, whilst the complementary problem-solving discussion, audit, peer-directed activities growing in strength throughout the course, reaching a maximum at the end. Early activities would involve helping PGAs to gain in confidence, thus some discussion and sharing of problems is essential at the very beginning. Similarly, as PGAs gain in experience, they will realise more and more that they need certain demonstrations and certain information. Thus there will still be information sessions to the very end of the course.

## **TEACHER TRAINING**

Different skills will be required by course teachers and course organisers. I would suggest that all teachers selected for the course should as far as possible have all the following skills and attitudes. They should be prepared to

1 accept ideas coming from the course organiser and from PGAs as to the subject matter of their sessions and as to the method they would use and negotiate agreement on these;

2 accept questions from the group and should be willing to encourage questions from the group;

3 ask questions of group members and have the skill to ask the right question of the right person at the right time in the right manner, supportively accepting 'incorrect' answers or no answer from an individual, being able to refine and rephrase questions which prove too difficult;

4 accept challenge and scepticism from any one group member, responding supportively;

5 help the group determine which of the ideas presented are appropriate for their own practice. (It may be more appropriate to leave this activity to the course organiser, as it will be often difficult for experienced practitioners to accept that PGAs will wish to reject some of what they have said and may only be prepared to accept some of it.)

6 present information succinctly and clearly, choosing slides (etc) and examples to illustrate. They should be able to demonstrate skills and (where this is possible) be willing to encourage PGAs to practise (or simulate) the relevant skills;

7 devise questions for buzz groups and problems for syndicates. Ideally theyshould be able to manage these groups or at least respond to course organisers' recommendations on management;

8 take an individual or group through a problem stage by stage, asking at least specific leading questions related to the problen, elaborating and providing information and reminders where appropriate;

9 sense when group members can indeed solve a particular problem and when they cannot.

10 sense when they should withhold the answer in order to encourage them to find out from some other source, and when they should provide the answer immediately.

When acting in the capacity as chair, course organisers should be able to intervene and encourage all the above by making suggestions to teachers as to how they might proceed or by acting as a co-teacher. As a teacher, they should be skilled in all the above but, in addition, be able to facilitate application sessions (knowing when it is appropriate for the teacher to be present or otherwise), make suggestions about projects and seminars, run problem-solving sessions structured in process (as described earlier), facilitate individual goal-setting and action-planning in pairs and groups, manage syndicate work (problem-centred groups and associated plenary sessions). They should be able to conduct supportively sessions designed to get PGAs to share experiences, problems and application of ideas in order to celebrate successes, remind themselves of previous action plans and to plan agendas for problem-solving work. They should know when they should act as primary resource to the group in any area of study and when it is likely to be more helpful to the group to meet another expert from whatever field, whether to provide variety or expertise they do not possess. They should be prepared to consult other experts on the design of specific sessions and activities or about methods they might use. They should be prepared to acquire training in teaching methods which are beyond their skill.

Ultimately, course organisers should acquire the ability to use experiential methods, to design roleplays and simulations in advance, to facilitate psycho-dramatic responses to problems and to facilitate audit. A necessary prerequisite to this would be specific training and experience as a participant to these methods. Alternatively they can invite someone skilled in these approaches.

All the above may seem ambitious. Many of the above skills have been demonstrated amply by many teachers. Some teachers have shown great ability in all the above. Many teachers have shown competence in some of these and are eager to extend their own skills. The object of any training for teachers is to help them extend their competences in the above ways so that they may enhance their effectiveness in communicating their own expertise and in enabling others to achieve high levels of competence, not only directly from their teaching but indirectly by encouraging motivation and skill to continue learning throughout professional life.

#### **APPENDIX 1**

#### Teaching 'methods' and associated objectives

Skills	Technical Skills					Interpersonal							Personal Skills											
	Clinical		al Mai		na Pr ial si		Prof sion	Profes Sional		General		Educa tional		Self mana men		f- ige it	d	Self- develop ment		Problem- solving				
	Κ	А	S	Κ	А	S	Κ	А	S	Κ	А	S	Κ	А	S	Κ	А	S	Κ	А	S	Κ	А	S
Lecture	*			*			*			*			*			*			*			*		
Discussion	*	*		*	*		*	*		*	*		*	*		*	*		*	*		*	*	
BuzzGoups	*			*			*			*			*			*			*			*		
Application Session	*	*	?	*	*	?	*	*	?		woi	uld	be i	ncl	ude	d by	the	e tea	ach	er		*	*	
Small Group Work	*	*	?	*	*	?	*	*	?	*	*	?	*	*	?	*	*	?	*	*	?	*	*	?
Seminar	*	*		*	*		*	*					*	*	*	*	*		*	*	*	*	*	
Short Project		C	ontr	ibu	tion	de	pen	ds c	on a	rea	cho	sen	for	pro	ject	, po	ten	tiall	ly d	eve	lops	sk	ills	
Long Project												d	itto	1	5	. 1			0		1			
Problem solving																								
1) Expert answers	*			*			*			*			*			*			*			*		
2) Expert helps	*	*		*	*		*	*		*	*		*	*		*	*		*	*		*	*	
3) feedback from																								
group	*	*	?	*	*	?	*	*	?	*	*	?	*	*	?		*			*	?	*	*	
4) Structured																								
process	*	*	?	*	*	?	*	*	?	*	*	?	*	*	?	*	*	?	*	*	?	*	*	*
Skills practice																								
- in study day										*	*	*							*	*	*	*	*	*
- in practice	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Goal setting/Action																								
Planning	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Simulation	*	*	?	*	*	?	*	*	?				*	*	?					*				?
Psychodrama			•			•			•	*	*	*	*	*	*	*	*	*		*		*	*	?
Self-directed																								•
reading	*			*			*			*			*			*			*	*	*	*		
Audit		dep	end	s or	ı ası	pect	is ai	ıdit	ed:	attit	ude	an	d sk	till o	deve	elop	mei	nt	*	*	*			

#### NOTES

\* This combination of method and content will contribute significantly to learning (K = Knowledge, A = Attitude, S = Skill). Gaps indicate lack of effect.

e.g. lectures on clinical matters are unlikely to have much effect on attitudes to those matters. Transfer will occur, in some cases, to self-development, problem-solving, educational skills: e.g. giving a seminar on a clinical matter should enhance the PGA's educational skills. Some gaps appear as the combination is unlikely to be used in this course, e.g. case discussion of self-management.

? Some contribution to skills-learning (usually minimal) by virtue of increased motivation to apply what has been learned in practice.

#### **APPENDIX 2**

# **Relation between Problem-solving Methods and Objectives**

		Understanding							
		Solving problems of concern							
TEACHER				Learning problem-solving skills					
DEVISES	Small Group	Х	*	**					
PROBLEM	Structured Discussion	х	*	++					
PGAs	Expert Answers		x						
SUGGEST	Expert Helps	Х	Х	++					
PROBLEM	Feedback Circle	Х	Х						
	Structured +	Х	Х	Х					
	Psychodrama	Х	Х	?					

\* depends on pertinence of problem

\*\* if structured

+ small group or whole group, group should have process structure made obvious at all stages - *no* content directed questions.

++ minimal, and only if experts helps group notice the problem- solving structure, preferably as they go on.

## **Problem-Solving Session**

- (i) Small groups of 4 - 6
  - a) Share and list week's successes on large sheets
  - b) Share and list week's problems on large sheets
  - c) Display these sheets on the wall
- Walk round and examine the lists. (ii) Facilitator decides how to deal with these, eg postpone some to a future session, replan the day, decide which option to take below
- Form small groups with *similar* problems, eg all clinical, managerial, interpersonal, intrapsychic (iii)
- Form small groups ensuring that members meet with *different* kinds of problems, or with (iv) expertise to help solve these problems
- Knowing time limits, select appropriate problem-solving method (v) a) Direct feedback from individuals – experts on call
- b) Simple discussion with time limit or
- c) Problem-solving cycle with time limit for each stage or
- d) Role-play or other method or
- and e) Individual goal-setting - record these as promises to be kept - as application session above
- (vi) Plenary session with reports from each group of their most interesting discovery or conclusion
- (vii) Plenary discussion of successes these may on reflection become problems. In any case, individuals might like to identify others who have been successful in areas they have not, for informal discussion during breaks.
- (viii) Deal with certain to selected (eg common) problems in the whole group by expert probing (using any experts present--quickly!). This might come early, after (ii) or at the end. The facilitator roves around to get an idea of common problems or problems best dealt with this way.
- (ix) Some combinations (referring to methods (i) (vii) above
  - (i) 5' stay in same group, deal with most important problems as follows: a)

	(v) a) problem 1 3' problem 2 3' problem 3 3'	
	b) problem 4 16'	(Total 30')
b)	(vii) 5'	
	(i) 5'	
	(ii) 5'	
	(iii) 3'	
	(v) a) problem 1 3'	
	problem 2 3'	
	b) problem 3 10'	
	c) problem 4 16'	
	(vi) 10'	(Total 60')

Obviously there are many alternatives. These are only two.

## **Application Session**

The numbered elements below can be put together in a variety of ways to meet specific circumstances and constraints. Three such ways are given after an outline of the various elements (i) - (v).

i. Facilitators run a whole-group discussion.

Advantages: They provide a clear framework for the discussion. They can assess the deficiencies of the study day and concentrate on them. (Any evaluator or observer present can record the whole process.)

- ii. Small groups of 4 6 go over the day and identify what they thought was practicable/impracticable, note these and report to Facilitator.
- iii. In small groups, each individual identifies any short/long term goals they wish to set firstly in silence and then to the group, each in turn, without interruption (eg two minutes (2') each).
- iv. Individuals record their own personal goals/promises in diaries/note- books.
- v. Form pairs, each in turn identifies goals, each person to facilitate the other; if this is carried out after small group work (iii), also reminding them as to what they said earlier (eg 5' each way).

#### vi. Some combinations:

(a) (i) go over sessions in principle, concentrate on what was thought to be impracticable (10') (ii) (20')

(v) (10') (iv) include in (v)	(Total 40')
(b) (i) (10')	
(ii) (20')	
(iii)(10')	
(iv) include in (iii)	
(i) plenary session (10 - 15')	(Total 50-55')
(c) (ii) (10')	
(v) (10')	(Total 20')

vii. In the subsequent study day, create a time when the pairs can get together to review the previous week's goals and the extent they achieved them.

Each person can act as their partner's conscience if necessary, continuing the reminders over future weeks as required.

Each pair could agree what should be reported to the whole group and do so in a short plenary session.

This could lead to a problem-solving session on factors inhibiting goal achievement.

## **APPENDIX 4**

## **Problem-solving Processes**

In order to enable problem-solving and the development of problem-solving skills, teachers can enable PGAs to work on problems by means of appropriate problem-solving processes. One method is as follows:

- 1. The problem is defined in terms of (a) symptoms and (b) causes. These are clearly differentiated.
- 2. The individual or better still a group creatively generates potential solutions to the problem by brainstorming; at this stage no solutions are evaluated or discussed.
- 3. Each solution is examined in terms of advantages and disadvantages.
- 4. Now each group determines which of these solutions are valid and if possible a best solution.
- 5. Action plans for implementing the solution are devised. The individual who suggested the problem, or all members of a group can now go away and test this particular plan. Ideally persons who brought in the problem should formulate their own action plan and commit themselves to carrying it out and sharing and reviewing their actions with the group at a later date.

An alternative problem-solving cycle is as follows:

- 1. Describe the problem
- 2. Restate the problem in terms of the change that is desirable, eg improved sensitivity to my DSA and her needs.
- 3. Define the forces which push toward improvement (driving forces) and the forces which resist improvement (restraining forces).
- 4. Decide which of these forces are the most important.
- 5. For each important force, brainstorm possible action steps which will increase the effect of driving forces and reduce the effects of restraining forces.
- 6. Review all the. action steps generated and select those most promising.
- 7. For, each action step, list all the resources which are required, review all the steps and resources in terms of a comprehensive action plan.
- 8. Before implementing, decide on how to evaluate the overall action programme.

Whichever method is used, or however these suggested processes are adapted, Problem-solving skills will be increased when

(i) PGAs practice the process themselves

(ii) The steps in the process are madé explicit

(iii) The value of the process and its steps are reviewed.

Success may be judged when the process is internalised; that is, when presented with a problem, PGAs will choose to use such a process to solve it.