A teachers' workshop*

MARSHALL MARINKER, M.B., B.S., F.R.C.G.P. Grays, Essex

The London teachers' workshop is one of the forms of work in the field of vocational training for general practice. The workshop is a study group of about 15 general practitioners which has been meeting regularly for two years. There have already been more than 40 half-day sessions.

Two assumptions

The doctors share two assumptions. The first was that the task should be to examine the work which each individual member did as a teacher. It followed that the group would not study educational method in the abstract, for example, by attending lectures on how to give lectures.

We chose from the possible terms 'group', 'course', 'seminar', 'research team', the descriptive label 'workshop', which already had an established use among educationalists, psychologists, social workers and others, and which has the connotation that a new problem is to be examined by the process of group work.

About half the doctors recruited to the group had had many years of experience in Balint seminars. They knew the strains imposed on the individual doctor when he is called upon to describe his work in detail, and then to endure what can sometimes be a highly critical analysis of his behaviour. The members of the workshop believed that a doctor who is not able to tolerate the strains which are imposed upon him by such criticism from his peers, will probably not be able to tolerate the strains imposed upon him in his role as teacher. Hence the second assumption.

Group dynamics

Every group, no matter what its composition or function, sooner or later develops a group identity. That is to say, it is recognised by people outside the group as having a distinctive profile of its own.

However, each group is composed of a number of different individuals, and these people are characterised by their own strengths and weaknesses, influenced by their own previous experiences, and driven by their own motivations for being a member of the group. These differences produce conflicts and polarities within the group, which give shape and direction to the task which the group intends to perform.

These conflicts and polarities have been experienced by the London teachers' workshop since it started and exploring them has been an important part of the group's learning process.

In analysing any particular piece of teaching, for example, there has been a conflict between those who preferred to discuss the content of what was taught, and those who preferred to discuss the method of teaching it; between those who wanted to discuss the techniques of teaching, and those who were more interested in looking at the learner's strategies of learning.

One of the functions of a workshop is to identify and explore the contradictions and conflicts that it finds in the course of its work. It does not have to function like a committee. It does not have to produce a resolution of opposing ideas. It has rather to reach an understanding of how these differences come about, and then to apply this understanding to an examination of how the teacher teaches and how the learner learns.

This paper sets out to give an interim, and limited report of the work so far. Each member of the workshop might have produced a totally different report. Each report would be as valid as another. This one describes the writer's own perceptions, and catalogues the most important lessons that he has learned from his colleagues.

*Based on a lecture given in the Department of General Practice, Aberdeen University, December 1971.

Journal of the Royal College of General Practitioners, 1972, 22, 551

Objectives

After the twentieth meeting we concerned ourselves solely with the problem of vocational training but at the eighth meeting I reported a consultation at which a senior medical student had been present.

Mr S was a lifelong epileptic and his condition was deteriorating. He came to see me after visiting a consultant neurologist at a London teaching hospital. The hospital letter recommended a modification in the patient's drug régime.

It was a regular feature of his treatment that he decided for himself what dose of drug to take and when to time it; although he discussed these schedules with me in great and obsessional detail, I had learned to agree with the decisions which he took entirely himself. He was about to retire from his job as senior librarian, a job which he had managed to maintain over the past few years, despite daily attacks of petit mal and weekly attacks of grand mal.

The members of the group were then attempting to pre-select educational objectives at the beginning of the tutorial. This seemed reasonable because unless we could pre-select our objectives, how could we follow a syllabus?

I decided to teach the student that the successful treatment of chronic conditions like epilepsy, depends on a sensible agreement between what the doctor wants and what the patient wants. In particular, I wanted to show that Mr S needed to control the details of his own drug schedule. I also hoped to demonstrate that for this patient, there was a strong need to be in control of the situation, in contrast to the loss of control imposed upon him by his disease.

The next day I asked the medical student what he had learned from the consultation and the discussion which followed it. I had to report to the workshop that the student had learned that diazepam can be a useful drug in controlling epilepsy.

The most salient point to emerge was that each consultation contains within it a vast number of legitimate educational objectives. For example, in the consultation which I have just described there were a number of possible objectives concerned with the nature of epilepsy and its treatment in general practice; to do with the general practitioner's view of chronic disease—in this case monitoring the development of the disease process; to do with the interaction between doctor and patient and their relationship (the area I chose); to do with the problem of this man's employment, his coming retirement, the way in which the general practitioner can prepare such a patient for the increasing loneliness and helplessness of his old age; and to do with practice management in relation to the monitoring of chronic diseases.

It shocked us to discover in a whole series of tutorials from consultations, that the objective which the learner learnt was very seldom the objective which the teacher had pre-selected.

Indeed, we found that it was impossible to pre-select an educational objective from the consultation. Whenever the teacher tried to do this, somehow he sterilized the tutorial. The teaching appeared competent and fluent, but nothing was learned—or at least, there was no recognisable link between the teaching process and the learning process.

Hot situations

We learnt about the selection of objectives, from consultations like the following:

A medical student was sitting-in with Dr A in an evening surgery. The patient, a 70 year-old widower, who lived alone and had a long history of depression, obsessional symptoms and hypochondriasis, telephoned to request a visit, complaining of incapacitating abdominal pain and vomiting. The teacher advised him to return to bed and promised to visit after surgery hours, having established that the patient himself would be able to let him into the flat.

The student overheard the telephone conversation, but made no comment until two or three patients had been seen. Then, he casually remarked that only a doctor who knew his patient well would be able to make that kind of decision. This the teacher rightly interpreted as, 'How can you sit there doing nothing, when the patient may be mortally ill?'

The teacher then sent the student to visit the patient and make his own assessment, and at the conclusion of the evening surgery they made a second visit together. In the tutorial that followed, the key objective that emerged was 'to show that previous knowledge of a patient enables the doctor to assess the urgency of a call for help'.

A further objective was also identified by the workshop: 'to show that in the absence of

agreement between doctor and patient about the physical basis of symptoms, the doctor may have to accept limited therapeutic aims'.

What we were able to identify here, as in so many of our other analyses of 'learning situations', was that a *key objective* was selected as a result of an interaction between the patient, the teacher and the learner. A study of the teacher-learner relationship, as it is manifested in the 'learning situation' was therefore as important in the educational process as a study of the doctorpatient relationship was in the clinical process.

Something further must be added. If the teaching is to be focused on the key objective and the learning is to be effective, that objective must be invested with a particular importance for both the teacher and the learner. We found that these objectives were invested with a certain intellectual or emotional excitement, and in our internal jargon we used the term *hot situation*. In the case above this was caused by the doctor's feelings of guilt and the student's feelings of anger.

The problem of syllabus

We increasingly realised the remarkable number of parallels which existed between the doctorpatient relationship on the one hand, and the teacher-learner relationship on the other. There were other parallels between our work as clinicians and our work as educators.

Dr B, a dynamic member of our group, had coined the term 'clinical opportunism' to describe how the problem-solving techniques of the general practitioner depend on his ability to pick up clues wherever the patient drops them, and to exploit every opportunity to solve the problem. The same opportunism was essential in the clinical tutorial—and this meant that we had to enter each tutorial far more flexibly than we had at first thought.

How then, could we reconcile our professed belief in the need for a syllabus—what might be described as the anatomy of the educational process—and this catch-as-catch-can approach to medical education?

The answer was provided by Professor Furneaux, Professor of Education at Brunel University, who has acted as adviser to the workshop. The following is a quotation from a letter which he wrote after our twelfth meeting:

'What is essential is that the teacher goes into every situation with a set of possible objectives at the front of his mind, and it is to facilitate this that the setting up of a vocabulary of objectives is so important. Equally important is recording what objectives have been achieved in each particular learner-teacher interaction over a whole set of interactions'.

Role-play

It was Professor Furneaux who showed us that we could go further than reporting the learningteaching situations which we were experiencing in our consulting rooms. He suggested that we should role-play these consultations within the group, and use role-play from which to teach.

As soon as we started this, we discovered the incredible reality of role-playing. What we had not expected was that a general practitioner, once faced with a patient who, as it were, defines his professional role for him (even though they are both play-acting) behaves like himself. Try as the doctor will, he cannot dissemble, he must take his role seriously, and he does so with compelling conviction.

The second, even more surprising finding, was that doctors are quite expert at playing the part of patients. The general practitioner's habit of keen observation and empathy, produced for us consultations which were sometimes painful, sometimes hilarious, sometimes tragic—but always real.

Although we tried most variations of role-play, the most successful results were obtained when the doctor played his own patient. We also examined two alternative techniques of role-play, competitive and collusive role-play. When the actors collude they are able to pre-select an educational objective without any difficulty, but the results are not very effective. Collusive role-play is bland, tasteless, and bears little resemblance to real-life consultation.

In the real-life consultation, doctor and patient do not always collude. They compete, they play against each other, and unless role-play can mirror this, then it cannot be a very useful tool for learning or teaching. So although role-play allowed us to bring learning-teaching situations within the group, it did not solve the problem of how to use the consultation to follow a syllabus.

554 Marshall Marinker

We learned one other lesson from role-play. The one role which none of us had been able to play was that of the learner. Although we resisted the idea for several months, we finally decided to open our doors to the rough winds of reality, and invite real learners—medical students and trainees—to come in and help us to learn how to teach. We made one or two audio-visual recordings of role-play, and then turned our attention to quite a different technique.

The learning process

During the past few months, trainees have been coming to the workshop bringing their problems—a topic they wish to discuss, a case which they have found difficult—to one of the teachers in the group. A short tutorial, usually lasting only ten minutes, then takes place, and the workshop observes and analyses this. This is what we are doing now and it has been yielding a good harvest.

Assessing a trainee

'Margaret' is a trainee, in her late twenties, unmarried, who was brought by her teacher, a member of the workshop, on her first day in his practice. We began with the teacher attempting an interview with Margaret, in order to learn her background of medical education, with a view to defining areas of future need. She explained that she had moved from Cambridge to one of the London teaching hospitals, with several house jobs afterwards. There were some clinical deficiencies which she had already identified in her own training including obstetrics and gynaecology, and dermatology.

The workshop felt that they had not learned very much about her. A woman doctor in the group asked some questions as well. She enquired about Margaret's educational background, and discovered (what had not come to light before) that Margaret had begun her career by intending to read zoology, had done psychology as a special subject at university, and just before taking her B.A., had suddenly decided that she wanted to do medicine. Had she been asked at the time why she had made this decision, she thought she would have found it very difficult to give reasons. We were then reminded of another piece of information. Until a year ago, Margaret had intended to be a specialist physician; the decision to go into general practice had been made because she felt she wanted to deal with people outside the context of hospital medicine and crisis illness.

I expressed my own belief, at this point, that this kind of information, obtained obliquely rather than directly, could be of great use to the teacher in planning his strategies for teaching over the coming year. In the process of consultation, the doctor has to make a hypothesis or best-guess on the basis of limited information. By the same token, the teacher must guess on limited information from teaching-learning situations, in order to make a hypothesis which he can later test.

My own hypothesis about Margaret was that she had a profound interest in human relationships, but that she approached this interest with a certain caution. She had moved from zoology to psychology, from there to an interest in medicine, and from an interest in medicine to a specific interest in a field of medicine, general practice, in which human relationships were paramount. Predictions could be made from this hypothesis about the way in which Margaret would learn about relationship problems in general practice.

Another piece of information which might have *predictive value* was that she had disliked her general surgery house job because the teaching had been 'bad'. She meant that her teachers had never told her whether they approved or disapproved of what she had done. She liked to know whether she was correct or wrong in what she was doing.

I made the prediction from this information, that Margaret would need a great deal of reinforcement of her learning, and that a non-directive counselling style of teaching might well be inappropriate to her, particularly in the early months.

With hindsight, I can now say that what I missed was Margaret's concern with her image and self-image as a doctor.

Problems selected by trainees

Margaret's first problem

A month later, Margaret presented her first problem for a tutorial with Dr B. She began by saying that this was a problem about dealing with incidental clinical findings.

She had been consulted by a 27 year-old woman who had been taking an oral contraceptive for months. A first blood pressure reading had been 120/90, a subsequent one 110/70, and when Margaret took it on this occasion it was 150/110. She had taken this merely as a routine on repeating the prescription and was nonplussed by finding the raised pressure. She asked the patient to rest for a few minutes and meanwhile sought out her teacher, Dr C, for advice.

Margaret particularly regretted that she had not been able to disguise her anxiety. Dr B responded to this by recalling an incident when he first went into practice. A young man had insisted on having his blood pressure taken, and Dr B had been astounded to discover a severe hypertension. Sometimes one was surprised by the results of so-called routine examinations, but ought one to be surprised? 'What have you learnt from this?' Dr B asked.

Margaret said that she would think earlier about alternative courses of action when she was eliciting clinical signs. It was a question, Dr B felt, of trying to be one jump ahead of one's own clinical findings, rather than of approaching the diagnostic process with the idea of crossing bridges when one came to them.

In the discussion that followed, the feeling was expressed that Margaret had received only a part of the answer to her problem. Had she, for example, been taught about the necessity of the doctor to live with her own anxieties? Dr D pointed out that Margaret had been thrown, at the time of the consultation, by the idea that the patient might not be able to bear the anxiety of knowing that she had hypertension.

Margaret's second problem

Later, at the same meeting, Margaret presented another problem to Dr E.

A young woman had presented with a recurrence of an urticarial rash. She was depressed and there was a social problem. Margaret thought that the rash was due to infestation by fleas and prescribed D.D.T. powder. The rash cleared up. Weeks later, discussing it with the partner in the practice who normally looked after this patient, she learned that the disappearance of the rash had also coincided with the young woman taking a difficult decision. About two weeks later she reversed her decision and the rash recurred.

In a very short tutorial, Dr E made the point that the cause of illness was usually multifactorial. The patient might well have fleas and a disturbing psychosocial problem. In general practice, it was more important to make inclusive diagnoses rather than exclusive ones.

He also identified that Margaret was concerned about how the patient would see her behaviour and her professional competence in prescribing D.D.T. powder. His response to this was simply to comment to Margaret that it seemed that the question of the patient's evaluation of her professional performance was a recurring problem to her. This was a clear reference to the earlier tutorial concerning the patient on oral contraceptives who had unexpectedly been found to be hypertensive.

Two further examples illustrate the recent direction of our work.

Robert's problems

'Robert' has been a trainee for about four months. He is in his late twenties and is married. He began a tutorial with Dr F, by saying that he faced two sorts of major problems as a trainee: the first concerned deficits in his factual knowledge, and the second concerned problems of management. He found that he was meeting new situations and he wanted to be told how to deal with them. For example, he said, "I met my first enuretic child the other day". The mother, said Robert, knew more about the problem than he did. "Do you think that you should always be one step ahead of the patient?" asked Dr F "Do you think that I, as a principal, should always be one step ahead in all situations?" He went on to point out that it was a part of the doctor's function to use the patient's knowledge about his illness and not to regard the patient's expertise as being in competition with his own. Robert found this very difficult to accept. "Some patients", he insisted, "want more authority from me than that, and I am not always in a position to give it". He had wanted Dr F to say, "I had a case like this last week and I did so and so". He had wanted to be told what to do. Dr F replied that Robert was asking of him just that kind of authoritative response which he felt the patient required from him. "You may want your teacher to give you all the answers, but he may not have them to give", he said.

556 Marshall Marinker

At this point, and before this tutorial was discussed, I suggested that it would be an interesting experiment to conduct a consequent tutorial, picking up the same problem concerning enuresis and developing an alternative line of learning-teaching.

Robert began again by saying that he thought he knew almost nothing about enuresis and wanted to know how he should tackle this sort of problem. I asked him how much he already knew about the condition. After much hesitation, Robert said that enuresis was bed-wetting, though there was some confusion in his mind between bed-wetting and incontinence. At what age did Robert think children normally became dry? He thought about three years. And why did some children not become dry? He thought they might have some abnormality of the urinary tract. "Such as?" "A double ureter". "Would this be a likely cause of enuresis?" "No". "What then?" "Chronic urinary tract infection". "Was this an easy diagnosis to make in children?" "No, a difficult one". "Was it common?" "No, uncommon".

By use of this socratic method, Robert eventually began to talk about enuresis in terms of faulty development—physical and psychological. He began to talk about which causes were common and which uncommon; about investigating the urine for bacteria; about looking at the emotional content of the family life.

The tutorial was stopped after the first few minutes and the point made that Robert already knew a great deal about enuresis but the information had not been clearly organised in his mind and it was necessary for teacher and learner together to explore what was already known.

One of the members, Dr G, was extremely critical of both these tutorials. He said that Robert had begun with a fairly explicit question: "How do I deal with cases of enuresis?" This teacher felt that here was a condition, enuresis, with a fairly common and clearly recognisable pattern, and that it would have been simplicity itself to describe this pattern of diagnosis and management at the outset of either tutorial. This would have immediately answered the trainee's needs and then the teacher, if he must, could go on to develop the more philosophical side of his tutorial—in Dr F's case concerning the problem of authority; in my own case concerning methods of problem-solving.

We agreed that the individual trainee's ability to tolerate anxiety, must be a limiting factor in using this style of teaching. In both the tutorials the teachers had specifically withheld giving ready answers. They had chosen not immediately to allay the anxiety of the trainee but to use the anxiety which was part of the trainee's motivation to learn. Once again, our attention was directed to the parallel between the teacher-learner relationship on the one hand, and the doctor-patient relationship on the other.

My last example illustrates some of the tentative conclusions which we are beginning to draw from the latest series of tutorials which we have analysed.

Penelope's problem

'Penelope' was a trainee in her third week in general practice. During the first session which she attended, there had already been two tutorials, each of which had started with a clinical problem and each of which had gone on to explore difficulties and uncertainties about Penelope's role as a doctor.

She presented her third problem of the afternoon to Dr F and said that there had been one disturbing situation, which she had met when she was a casualty officer, and which she dreaded meeting again in general practice.

She had met two patients who were experiencing 'flashbacks' following intoxication in the past with L.S.D. These were quite frightening experiences, and although she knew that diazepam, or some similar substance, was the drug of choice, she felt very disturbed by these patients and their symptoms, and wanted to know how to react when she next met the problem.

"What ought I to do?" she asked. "It terrifies me—because I now appreciate how serious these attacks can be".

In a long and sensitive tutorial, Dr F explored with Penelope the nature of the doctor's responsibility for the patient. He allowed Penelope to talk about what she felt to be the enormous weight of this new responsibility which was pressing down upon her. He developed with her the idea of the limit of responsibility, and he reflected the limited responsibility of the doctor to his patient in the limited responsibility of the teacher to the learner.

Dr H began the ensuing discussion by drawing a parallel between this tutorial and that with

Robert two sessions ago, which had begun with Robert's problem about enuresis. Dr H felt that Penelope really wanted help with a practical problem. Which was the right kind of objective in this situation? Had Dr F been wrong to pursue the topic of responsibility and self-image?

Dr F replied that the selection of this objective had stemmed naturally from the previous tutorials that afternoon. Most members thought that the objective was a legitimate one, and perhaps the most important one to accomplish with Penelope.

There was also no doubt that Penelope had asked for practical help. How should she deal with 'flashbacks'? Most of us felt, further, since we had never met the term 'flashback' before, that perhaps Dr F had not known the meaning of the word either. Another member felt that Dr F had missed the opportunity of allowing the trainee to teach him. "Was this", asked Dr I, "a reflection of the teacher's need to be omniscient? Was Dr F, in fact, not demonstrating his own need to remain authoritative, while counselling the trainee to relinquish the authoritative stance?"

The last piece of evidence in this tutorial, came from Penelope herself. She thought that the tutorial had been very helpful indeed. But she still did not know what to do about flashbacks.

Two key objectives

Several times, in different guises, we met this problem of conflict in the selection of objectives. How can we understand it in terms of planning the learning experience of the trainee during a whole vocational training programme?

The conflict concerns the trainee's immediately perceived need, usually for clinical facts about diagnosis and treatment. At the same time, the teacher perceives important areas of need arising from the trainee's questions. This second set of needs perceived by the teacher concerns professional attitudes, problems of interpersonal and social skills.

Time and again (and this may be a reflection of the 'apostolic functions' of many of the members who make up the workshop) the teacher chose to set aside the immediate need of the trainee in our tutorials, and to concentrate on what he himself perceived as the more important objective. Because this objective seemed to answer a deeply felt need of the trainee, and usually because of the skill of the tutorial, the trainee came to recognise that what had been accomplished was of value to him. But this is not quite enough. In Penelope's own words, "I still don't know what to do about 'flashbacks'."

The truth must be that both sets of objectives are essential. How are they to be achieved?

There exists a number of taxonomies of educational objectives, each with its own language. The division of objectives into two main categories is basic to most of them: cognitive objectives, to do with knowledge and manual skills; attitude objectives, to do with social and psychological skills.

It may be that the successful tutorial should accomplish objectives from both categories. We had previously tended to the belief that there was *one* key objective (to be more accurate a complicated set of objectives, clustered around one key educational aim). This was identified by a process of negotiation between teacher and learner.

The workshop now feels that this picture may be too simple to account for what actually happens. We are beginning to conclude that a complete tutorial of this nature should accomplish not one, but two key objectives. First, a 'cognitive' objective, stemming from the trainee's opening statement of his problem. This objective we term the *immediate* objective.

Second, an objective which the teacher perceives as being central to the trainee's development as a general practitioner, and which derives from the 'attitude' category of objectives. This we term the *developmental* objective.

Further, there is evidence that the sequence of events in any one tutorial should be first to accomplish the *developmental* objective, and second to accomplish the *immediate* objective. In this way the trainee's anxiety can be used to reinforce the teaching of the *developmental* objective while he is still awaiting an answer to his *immediate* problem.

Some characteristics of the workshop

I have referred to the group identity of the workshop. In part this has resulted from the fact that half of the members had previous experience, often during many years, in Balint seminars.

558 Marshall Marinker

To be more accurate, the workshop's identity has resulted from the interaction, sometimes accompanied by a considerable rise in temperature, between those members who had had this sort of experience and those who had not.

We have come to believe that these differences in learning experience in general practice reflect other, deeper, differences which concern styles of thinking and problem-solving. The more that we look at these differences, the more we are convinced that each sub-group has much to learn from the other, and that the trainee will best be served if his teachers are drawn from both kinds of doctor. This is an avenue of research which the workshop is now planning to follow.

Workshops and Balint seminars

There is, however, a very important difference between a Balint seminar on the one hand, and our workshop on the other. This difference has implications for general practitioners learning in groups, which we believe go beyond the parochial problems of our own workshop.

A Balint seminar has a leader who is not a general practitioner (usually a psychoanalyst) and he possesses special knowledge, skills and attitudes, which form the basis of the seminar's learning and exploration. His leadership, therefore, stems from the authority of his expertise, though it will only be maintained if he has also the special skills of group leadership.

The workshop has no such leader. None of us had such expertise, and we had so constructed the group that our expert (who was an educationalist) functioned as a resource man, and acted as our adviser only on request. He had visited us only twice in our two-year history.

We have found that this stresses the members of the workshop. They have to agree to accept a leader who has no special expertise. They have to invest him with their own corporate commitment to the task in hand, and they have to achieve a mutual trust which, in our own experience, is not easily won. The stormy experience of this group process is, in itself, an important learning situation for the members of the group. From it we should have learned something about the problems of functioning as a teacher with a group of trainees. Already our members are teaching such groups and the reporting back of these experiences will become an increasingly important activity of future workshops.

Evaluation

What has been the value of the London teachers' workshop? How should it be evaluated? In the long term, the goal of any programme of education and research in general practice must be the improvement in the quality of patient care. In the short term, it is not practical to go beyond such goals as the development of more vocational training programmes, and perhaps the detailed results of such evaluation exercises as the College's membership examination. The relationship between these measurements and the quality of patient care must, at present, remain an act of faith.

The workshop is faced with two sets of problems related to evaluation. First, how can the teacher evaluate what has taken place in the course of a tutorial?

Our experience so far suggests that this is not a very profitable question to ask. The individual tutorial in general practice, rather like the individual consultation, is not so much an entity in itself, as part of a process. Some diagnostic work is done, something more is learned about the needs and the problems of the trainee: and some therapeutic work is done, the trainee is given some help in solving his problem. But the outcome of teaching (like the outcome of care in general practice) is seldom immediately obvious. Of course there are many exceptions to this—it is easy to ascertain that the trainee has learned the appropriate treatment of otitis media in general practice, just as it is relatively easy to see that the child suffering from otitis media has responded satisfactorily to the doctor's medication.

Beyond the immediate evaluation is the more difficult long term one. What has been the effect of the learning in this given tutorial, on the trainee's development as a general practitioner? Here our assessments have remained very subjective. The attempt to ask the trainee, "What did you learn from that?" proved useless.

It is in the nature of *developmental* objectives that time is needed in order to achieve change. My own belief is that the subjective judgment of a group of peers, like the workshop, is as sensitive a measurement of the quality of a tutorial, as we shall find. The objective exercise

which will follow this, will involve an examination of the records of the workshop's work and an identification of those factors in the tutorial which the group believed to be 'good teaching' and 'bad teaching'.

The second set of problems concerns the evaluation of the workshop experience itself. How have the members been changed by the experience, and is the change valuable? Such observations as we have made are crude and subjective. The continued existence of the workshop, consistently good average attendance, and the fact that the teaching commitment of the members of the workshop as a whole has greatly increased during its two-years duration, suggest that the members find the learning experience valuable as teachers, and are increasingly applying the lessons learned.

Deficiencies in methods of evaluation

We may be criticised for not having created a more rigorous evaluation exercise in order to monitor the changes in ourselves. We did not do so intentionally, and my anxiety about evaluation procedures has grown rather than diminished during the past two years. The belief that every educational exercise can, and should, be objectively evaluated is, I believe, a potentially dangerous one—the more so because it sounds so reasonable. It must be said that educationalists do not yet have reliable techniques for measuring those behavioural changes concerned with the learning of thought processes, social skills, interpersonal skills and self understanding rather than learning of thought processes, social skills, interpersonal skills and self understanding.

It is precisely these categories of educational objectives which form the basis of vocational-training programmes in general practice and which contribute to the process of learning how to teach. If we become limited by our inability to measure change meaningfully in this area, then we will only construct such courses, study groups or workshops, which set out to achieve what we know we can measure. Educational research would then become the enemy of educational invention; we would become totally respectable and totally impotent.

Conclusion

I make no attempt to sum up our findings so far. To do so would be to suggest that they represent a system of truths about face-to-face teaching. In fact, they are no more than hypotheses, reasonable guesses, what Medawar would call 'imaginative conjectures', based on the scant evidence which we have been able to gather.

There are a growing number of teachers' workshops in the country. Each is an experiment. The experiment is useful to those of us who take part in it, in that we are able to develop techniques for looking at the problem of teaching general practice. We make many mistakes—and perhaps the mistakes are the most valuable experiences of all. Above all, the experience of the London teachers' workshop so far has suggested to us that our first and major hypothesis can be supported. That is, that the workshop itself is a valuable method of learning about teaching.

Acknowledgements

The work described in this paper was carried out by the members of the London teachers' workshop. They are Drs J. Bennison, S. Bourne, H. J. Carne, C. F. Donovan, D. M. Grant, G. Gomez, S. E. Josse, M. Marinker, J. S. Norell, M. Ross, M. R. Salkind, W. Styles, Bernice A. Tanner, J. T. Woodall, L. I. Zander.

The workshop owes a lasting debt of gratitude to Professor Desmond Furneaux, Professor of Education at Brunel University, who acts as its adviser, and to the growing number of medical students and trainees who help in our work, and whose identities are concealed by randomly chosen first names.

My secretary, Mrs Hazel Benstead, has earned our special gratitude for her help in the preparation of over 40 bulletins from the workshop, on which this report is based.