

# ***Teaching on the Run Workshop:*** ***Melbourne Convention Centre, 13 May 2006, 9.30am-5pm***

## **Program**

### **9.30 AM. General Introduction**

#### ***Welcome and Introductions***

##### Purpose

- To describe the programme and its objectives.
- To identify the approaches which will be taken during the programme.

##### Mode

Convenors and participants introduce themselves and outline their objectives for the course  
Discussion of the programme and approaches.

### **Clinical Teaching Module**

#### ***Teaching in Clinical Settings***

45 min

##### Purpose

- To identify opportunities for teaching in busy clinical environments.
- To discuss the reasons for teaching in these settings.
- To identify teaching methods that are known to work well in a clinical setting.
- To recognise adult learning principles in practice.

##### Mode

Group discussion

#### ***Engaging the Learner***

30 min

##### Purpose

- Observe and critique different questioning techniques in a teaching interaction.
- Distinguish between closed and open questioning techniques.
- Discuss the importance of questioning to reveal gaps in the knowledge base of the learner.

##### Mode

Video (bedside teaching) and discussion.

#### ***Morning Tea***

#### ***Micro Teaching Session***

60 min

##### Purpose

- To practise an approach to teaching in different situations.
- To critique a colleague giving a mini-lecture, leading a discussion
- To discuss the framework of set, dialogue and closure as it applies in a clinical environment.

##### Mode: Two Groups

Micro-teaching by participants followed by critique.

### ***Reflection, Summary and Close***

30 min

Purpose

- To examine teaching in different clinical settings.
- To think about ways to apply teaching techniques to practice.
- To briefly summarise topics and issues arising in the module.
- To evaluate the module.

Mode

Small group discussion led by facilitators

Individual reflection.

Evaluation.

12.30 – 1.15 pm LUNCH

## **1.15PM Assessment and Appraisal Module**

Workshop  
duration

### ***Setting the Scene***

60 min

Purpose

- To define the terms appraisal, assessment and evaluation
- To identify the features of effective appraisal and assessment in a clinical setting.

Mode

Discussion and presentation.

### ***Giving feedback***

30 min

Purpose

- To view the application of a positive critique method for giving feedback
- To highlight the importance of positive feedback to the learner

Mode

Video and discussion

### ***Afternoon Tea***

### ***Planning Formative Assessment/ Appraisal***

45 min

Purpose

- To discuss the importance of setting objectives for formative assessment or appraisal.
- To develop a strategy for conducting an effective formative assessment or appraisal of a junior doctor.
- Consideration of Junior doctors with difficulties.

Mode

Group discussion.

Working in small groups with a scenario, participants plan an appraisal strategy.

### ***Reporting back and wrap-up***

30 min

Purpose

- To report back on the appraisal plan developed by each group.
- To discuss the strengths and weaknesses of the appraisal plan.
- To discuss issues related to appraisal and assessment.
- To evaluate the module.

Mode

Group reports and discussion.

Evaluation.

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# Teaching on the Run

*Establishing teacher training programmes in Australia*

A Commonwealth Department of Health and Aging funding project, through the Medical Training Review Panel

## Pre-Course Reading Package

**Melbourne Exhibition and Convention Centre**

**Saturday 13 May, 2006**



THE AUSTRALASIAN COLLEGE  
OF DERMATOLOGISTS



THE UNIVERSITY OF  
WESTERN AUSTRALIA



### Course Development

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## 1. Introduction

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The purpose of the *Teaching on the Run* course is to:

- Help clinical teachers recognise opportunities for teaching in various clinical settings
- Encourage clinical teachers to do more incidental teaching as they work with junior staff
- Build confidence so that senior doctors feel confident in sharing what they know and teach more effectively.

The programmes were initially developed in Western Australia for teachers at SCGH. Through funding from the Department of Health and Aged Care, the EdCent in the Faculty of Medicine and Dentistry at UWA and PTAC (WA) are able to make these programmes available for other groups around Australia, with the aim of increasing the number of teachers who have participated in such a course, as well as training facilitators who can continue to run the course in their own state.

Participants will already have a wealth of teaching experience and this course seeks to build on current teaching practice. By gaining a clearer understanding of how adults learn and putting this knowledge into action, there is a potential to markedly improve teaching.

The *Teaching on the Run* course has been designed to enable participants to build up confidence in applying the principles of teaching adults in the everyday work situation. The modules have been developed focussing on General (Bedside) teaching, teaching of Skills and Assessment and Appraisal. Each module consists of a sequence of teaching sessions that vary in length.

A variety of teaching approaches are modelled in this course to maintain interest and motivation. They include small group discussion, interactive lecture presentation, micro-teaching, positive critiquing and evaluation. These approaches have been selected to facilitate participation in the course.

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## 2. Adult Learning

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Adult learning is substantially different from that of children for a variety of reasons. The teachers who have had the greatest impact on us achieved that effect not necessarily because they were the best surgeons or physicians in their fields. Rather they were good teachers because they may have made a difficult concept seem straightforward, a boring subject interesting or relevant, or even may have imparted a level of inspiration in those they were teaching.

Some of the key features to bear in mind in the development of successful adult learning include:

- Adult learners retain 90% of skills learnt by doing rather than by watching.
- Adult learning needs to be immediately relevant.
- Adults need to be actively involved.
- Adult learners have a surprisingly short concentration span.
- Adult learners need clear goals and objectives.
- Adult learners need feedback.
- Adult learners need an opportunity for reflection.

***The most important features of successful adult learning include the identification of clear goals, relevance to practice and the opportunity for reflection.***

### Building on principles of adult learning

Adult learners are most successful when...	The teacher should therefore...
There is a high degree of personal motivation	Use the learners' enthusiasm
The learning is within their capacity to learn	Avoid excessive use of jargon and/or showing off his/her own knowledge.  Target the learning at an appropriate level, draw on previous knowledge and build on.
The learning experience is meaningful	Clearly relate the learning experience to practice.
There is active involvement	Involve the learner.  The types of questions asked are of fundamental importance in promoting thinking and active learning during teaching.
The learning is experience-centred The learner can reflect on the experience	Clearly relate the learner's experience and his/her own experience, requiring the learner to ask and answer questions.
Clear goals are set	Identify the expectations of each learning experience.
Regular feedback is provided	Provide regular, timely feedback, which is specific, both for positive features and suggestions for improvement.

### 3. An Approach to Clinical Teaching

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Every planned learning experience can be broken into three key elements.

**Set  
Dialogue  
Closure**

**SET** refers to getting ready for the teaching session.

The four main points to the SET are:

<b>R</b> oles	the trainer's role, the learner's role, the patient's role
<b>O</b> bjectives	what they are going to learn
<b>L</b> inkages	how it links to previous or future teaching episodes
<b>E</b> nvironment	the physical aspects of the room

- In the clinical setting the preparation of the patient as well as the teacher and learner needs to occur. The patient must give their consent prior to the teaching episode.
- Take a few minutes to consider what you would expect the learner to achieve. Objectives will vary for individuals depending on their seniority and background. Ask yourself what exactly is to be achieved and then a rough estimate of the time it might take.
- Don't forget to make clear linkages where relevant to past or future teaching episodes.
- Consideration should be given to the physical aspects of the room – are the surroundings warm and comfortable for the patient? Is there sufficient privacy for the patient? Do you need to be standing or is it possible to arrange seating? Is the number of people present appropriate for the learner?

**DIALOGUE** is the crucial part of the planned learning experience and involves interaction between the learner and the teacher.

A useful acronym for DIALOGUE is:

<b>Q</b> uestions	these should be used as often as possible using a combination of closed and open questions
<b>U</b> nderstanding	clearly a key focus of any interaction
<b>E</b> yes	two way contact
<b>S</b> timulation	making it interesting
<b>T</b> iming	finish on time

Remember that the adult learner's attention span is about 10-15 minutes. Patients also get tired in encounters where they do not have an active part. So, anything longer needs to be broken into parts either by a change in activity or by a summary, a pause, or a question. Think about the sort of questions you are going to ask. Try to involve the learner rather than just talking to them. This means getting them to think and reflect.



**CLOSURE** should involve three main elements:

<b>Review</b>	ask for any questions, check that all is understood
<b>Eyes</b>	again, maintain eye contact with the learner
<b>Summary</b>	a short concise summary of what has been covered
<b>Termination</b>	a definite end

Learners should have an opportunity to bring up any questions they may have. This should then be followed by a positive critique. The whole process should be summed up and a clear termination given – for example, by thanking the patient for their cooperation. It may also be appropriate to spend some time explaining to the patient what they heard during the session.

### **Application to Opportunistic Teaching**

How do you apply the SET, DIALOGUE, CLOSURE approach to opportunistic teaching moments in a clinical setting?

The approach still relevant but will vary depending on the situation. You may not be able to consistently plan a teaching episode in detail but you can still pay attention to certain aspects.

#### SET

Is the patient comfortable?

Do you know the knowledge base of the junior doctor? If not, then you may need to use questions to probe their level of understanding.

Do you know exactly what you want to learner to achieve?

#### **DIALOGUE**

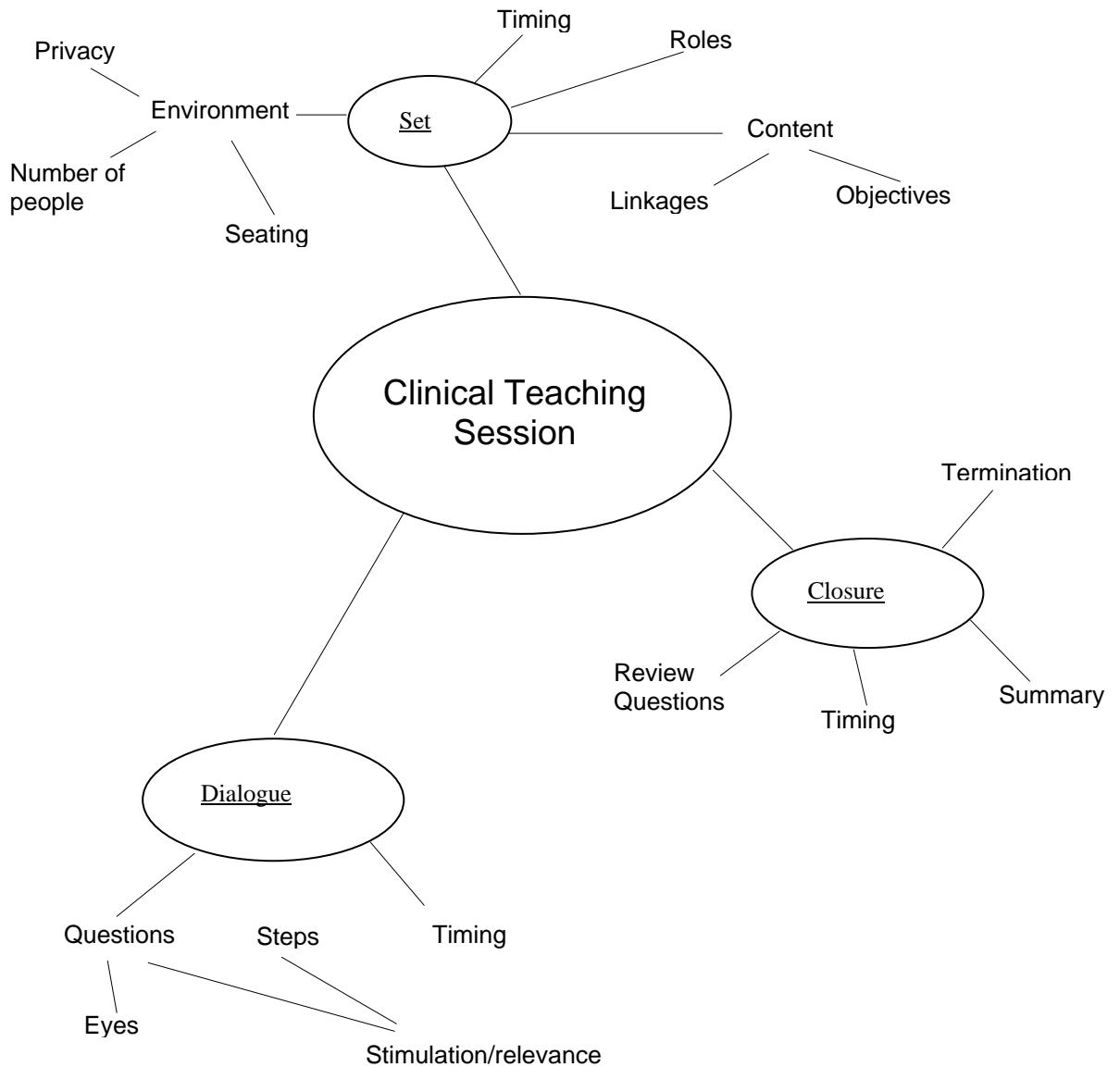
All the aspects outlined previously are still relevant and should be possible in almost any clinical setting.

#### CLOSURE

This stage is of critical importance in the clinical setting. If you don't offer the opportunity for questions, discuss what needs to be followed up and establish whether there are any outstanding tasks to be addressed, the session will be left hanging.

Spend a few moments now thinking about how you could apply the SET, DIALOGUE, CLOSURE method to your next clinical teaching episode.

**A diagram view of the SET, DIALOGUE, CLOSURE approach to teaching in a clinical setting**



Adapted from Peyton, J.W.R. 1998. *Teaching and Learning in Medical Practice*. Great Britain: Manticore Europe Ltd, page 203.

## 4. Asking questions

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Dialogue is the most crucial stage of a teaching session. Interaction between the teacher and learner during this stage depends on the types of questions asked. The questions you ask will promote thinking and active learning during teaching.

There are three types of questions.

### Yes/No questions

A question, which required an answer that is 'yes' or 'no', does not stretch the learner. But if you have a learner who is shy or lacking confidence, this is a basic type of question that will get the talking going.

### Closed questions

A closed question is the sort of question for which there is a specific and correct answer. For example, what are the most common causes of difficulty in swallowing? This type of question is useful because it enables you to check the learner's knowledge base but not necessarily their level of understanding.

### Open questions

An open question usually begins with 'why' or 'how'. There are generally no right answers and allow you to probe the reasoning process of the learner. Open questions usually require some evaluation, comparison, problem solving. They can also be used to allow and encourage divergent thinking or novel responses.

### Types of Questions and Examples

<i>Testing questions</i>	Checking knowledge	These mainly begin with words like; what, where, when, how, which, how many/big. (eg What is the name of ...? )
	Comprehension and interpreting	Compare, distinguish, show, find evidence, try to prove, interpret, re-arrange, restate, explain differences (eg Which are more alike? What do you infer from these results? How are these common? What is different?)
	Applying/Analysing	Specify conditions for, arrange, demonstrate, make use of, illustrate/ give and example, explore, discover, form and hypothesis.  (eg What are the consequences? What conclusions? What is necessary? Under What circumstances? What are the problems? What are the causes? How could you? What relevance does that have in...?)
	Synthesis	Solve this, think of an approach, create, devise, speculate, imagine, design.  (eg What do you suggest? If the...changes? What alternatives? How many different ways? What would happen if? Can you summarise...?)

	Evaluation	Check the results to prove a point, evaluate data against standards, rank, argue from all sides.  (eg What do you think will be best? Why do you think that? Was it good/bad, right/wrong? Will it work?)
<i>Clarifying questions</i>	To help the learner clarify their thinking on a point or topic.	Can you rephrase that? What did you mean by...? Can you give me an example of...?
<i>Elaborating questions</i>	These help students express themselves more fully.	Can you tell me more? Can you elaborate on that? Uh-huh, what else?
<i>Reflecting and deflecting questions</i>	Use these questions if the learner wants an answer from you or wants to know what you think – and you do not wish to give the answer.	Well, what do you think? Do you have any ideas about what it means? (if applicable) What do others in the group think?
<i>Supporting and valuing questions</i>	Use these questions if the learner has gone off the track and you need to bring them back without making them appear foolish.	Could you think about that again? How does that fit with what you said before about...?
<i>Checking and building questions</i>	This could be used if the learner is having difficulty formulating ideas for the first time.	Let me just check that I understand you, are you saying...' How does that connect with what you said before?  (if in a group) Would anyone else like to comment on what Jo has said?

### **Pauses**

Once you have asked a question be prepared to wait for an answer. Short silences are not necessarily a

bad thing – they often get the learner to talk more freely if they know you require and are prepared to wait

for an answer.

## 5. Positive feedback

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Feedback is an essential part of the learning process and critiquing a learner's performance of a task is a skill in itself. Positive critiquing is very valuable to a trainee's outcome whilst arguably a negative critique may markedly reduce the value of an educational experience.

Critiquing using a participant-driven method will allow the learner to reflect on their performance. After the participant has completed the skill, presentation or teaching episode the following four step approach to critiquing is applied:

1. What the learner thought went well
2. What the other learners thought went well (if applicable)
3. Opportunities for improvement identified by the learner
1. Opportunities for improvement identified by the other students/instructor.

Tips to think about when developing your positive critiquing skills might include:

- Think of three specific items when critiquing a performance - a learner is unlikely to walk away remembering more than three points.
- Avoid use words like "but" and "however" in a critique as these tend to turn the critique "upside down" converting your comments from positive to negative. Medical people tend to be self-critical and may focus on the negative aspect of a comment than the intended positive aspects.

Critiquing a learner's performance of a newly learnt task is in itself a valuable skill. Positive critiquing is constructive and negative critiquing is destructive.

## 6. Teaching Skills

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Teaching skills involves breaking skills down into structural steps. Consider the last time you taught someone a new skill outside of the medical field. It may have been relatively simple like changing a tap washer or it may have been a more complex task. When new skills are taught we innately break the skill down into a series of steps. You might have demonstrated the skill in real time first and then demonstrated the skill in slow motion whilst commenting on the important steps.

The successful teaching of skills can indeed be broken down into the following steps:

PHASE	TASK	ACTION
1	Demonstration	Instructor demonstrates the skill at normal speed
2	Deconstruction	Instructor demonstrates the skill by breaking it down into simple steps
3	Formulation	Instructor demonstrates the skill whilst being “talked through” the steps by the student
4	Performance	Student performs the skill and describes the steps

**This approach takes a little practice in real life and the tendency may be for the teacher to “talk themselves through the first demonstration”.**

It is very important to give constructive feedback to the learner. It may take several attempts to get it right. Always correct mistakes at the time they occur (don't wait for the learner to get to the end before correcting an error). Remember to leave time for questions at the end of a session and if appropriate, plan the next learning experience at the end (closure).

Here are two questions that you might like to think about before you come to the training session or do additional reading on:

- How can the four-step approach to teaching practical skills be applied in a busy clinical setting?
- How is the four-stage approach modified depending on levels of expertise?
- How can the approach be modified when what you plan to teach may be a procedure for a rare condition and one where you are unlikely to have another chance in the near future to practice again?

**Bring any questions you have to the training session.**

## 7. Formative Assessment, Summative Assessment and Evaluation

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### Background

Formative Assessment, Summative Assessment, and Evaluation are integral parts of educational programs, yet there is much confusion as to what they mean and when they should be used. In the ACD Training Program both formative and summative assessment are important parts of our system.

### Definitions

**Formative Assessment** is a process that is primarily educational and developmental, which describes the current performance and learning needs of an individual. It is a joint process between the trainer and trainee and should be seen as confidential and non-threatening. Another term used in this setting is **appraisal**. Although formative assessment, which is used to “inform” progress towards passing a summative assessment, usually only looks at those outcomes in the summative assessment, in the ACD training program formative assessment is much broader and looks at personal progress and may involve mentoring.

**Summative Assessment** is a judgement about someone’s performance by defined criteria, which are usually external (set by colleges, schools etc).

**Evaluation** is the systematic collection of information in order to make judgments about the training program or elements of the training program. Evaluation is quite different to assessment. This workshop will not focus on evaluation, except by illustrating its use (in evaluating this course).

All should be an integral part of the trainee’s experience in the clinical setting, with the focus of formative assessment being the educational development of the trainee, of summative assessment on ensuring progression of only competent doctors, and evaluation, to ensure the experience of trainees can be improved.

## Comparisons

FORMATIVE ASSESSMENT	SUMMATIVE ASSESSMENT
<p><b>Purpose</b></p> <ul style="list-style-type: none"> <li>▪ Describe current performance in terms of prior performance and future plans</li> <li>▪ Educational and developmental</li> </ul>	<ul style="list-style-type: none"> <li>• Measure performance against an external criteria</li> <li>• Rank people</li> <li>• Determine progress</li> </ul>
<p><b>Data Collection</b></p> <ul style="list-style-type: none"> <li>• Supervisors report</li> <li>• CV, self assessment</li> <li>• Results of an assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Should be objective and reliable</li> <li>• Collated supervisors ratings, assessment of competence in essential procedures, audit, statistics</li> <li>• MCQ, OSCE, SAQ etc used elsewhere</li> </ul>
<p><b>Methods</b></p> <ul style="list-style-type: none"> <li>• Interview essential</li> <li>• Consensus</li> <li>• Self reflection</li> <li>• Counselling</li> <li>• Mentoring</li> </ul>	<ul style="list-style-type: none"> <li>• Judgemental</li> <li>• No consensus</li> <li>• Often does not involve feedback</li> </ul>
<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Potentially biased and idiosyncratic</li> <li>• Depends on the experience of the trainer and trainee</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to collect reliable data on all important areas</li> <li>• Time consuming</li> <li>• May be difficult to measure all important areas</li> <li>• May not be relevant to learner</li> </ul>

In the clinical setting, such as with trainees, formative and summative assessment may use the same tools (eg consultant ratings) but it is the PURPOSE to which the data are used which determines whether the assessment is formative or summative. Formative assessment is a consensus defining the educational needs of the trainee, whatever level they are performing at, whereas summative assessment will determine

whether they have reached the standard deemed necessary to progress further. **When forms are being completed, you need to be aware of the purpose of the assessment.**

Summative assessment can include a formative element (for example, trainees who fail the fellowship examination may be given feedback about their performance which they can use to guide their learning for their next attempt at the examination) but formative assessments cannot also be summative.

Trainees of the ACD undertake comprehensive assessments during their training. This includes formal formative assessment in conjunction with their Supervisor of Training, and a series of summative assessments. These are outlined in the Training Program Handbook which can be accessed via the College website [www.dermcoll.asn.au](http://www.dermcoll.asn.au) . Whilst Clinical Supervisors are not involved in the formal Formative Assessment process, elements of formative assessment (or appraisal) should take place routinely and opportunistically as part of the teacher-learner interaction. All supervisors require well developed skills in helping trainees to determine what they need to learn and giving constructive and timely feedback.



## 8. The Ideal Formative Assessment/Appraisal

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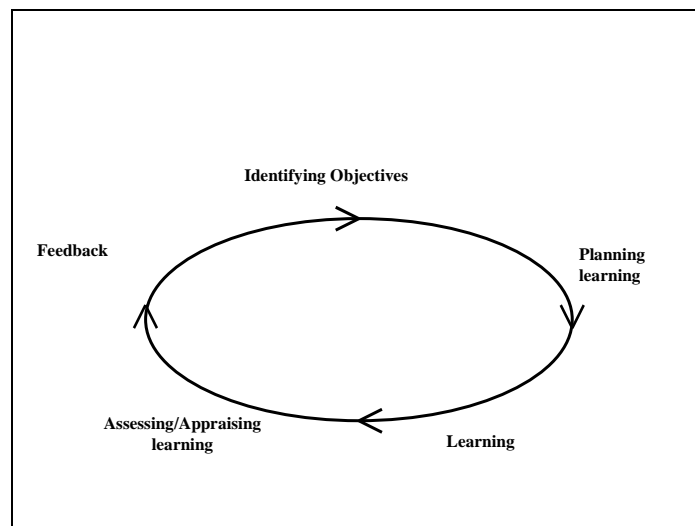
The key features of effective appraisal and assessment are

- Clear statement of criteria/objectives to be achieved.
- Planned with time set aside.
- Should involve
  - –An initial meeting to establish objectives
  - –On going appraisal and review of objectives
  - –A final meeting to discuss outcomes and plan future.
- Regular, timely, constructive feedback and encouragement•
- The trainee has input

## 9. Role in the Learning Cycle

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Good formative assessment and appraisal requires knowledge and skills. They have however the potential to have a marked impact on learning and are as or more important than other things we value, such as good teaching. The learning cycle (below) describes the usual mode of learning, with progression determined by episodic assessments. Good assessment and appraisal are much more than being about passing “exams” and can set up a cycle of self reflection and resetting of objectives throughout an individuals career.



### The Learning Cycle

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## 10. Suggested further reading

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There are many references on teaching and learning but the ones listed below will give you a good overview to the area.

### General Teaching

Peyton, J.W.R. 1998. *Teaching and Learning in Medical Practice*. Great Britain: Manticore Europe Ltd.

Newble, D & Cannon, R. 1996. *A Handbook for Medical Teachers*, 3<sup>rd</sup> Edition. London: Kluwer Academic Publishers.

### Bedside

Cox K. 1993. *Planning Bedside Teaching*. MJA;158:493-495. (one of a series of 8 articles by Cox)

### Assessment and Appraisal

Jolly BC, Grant J, Eds. 1994. *The Good Assessment Guide*. Joint Centre for Education in Medicine, London.

RACS of England, 1998. *Assessment and Appraisal in Training Surgeons*. Raven Dpt of Education, RACS.

Jolly B. 1997. Assessment and Appraisal. *Medical Education*;31:20-24

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