

# **Teaching Tips for Tutors**

# A brief guide to teaching for General Practitioners



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### Introduction

Welcome and thanks for taking part in the undergraduate teaching. It is very rewarding, as we are sure you will realise. This brief guide is aimed at giving you a few key tips to enhance the experience for yourself and the students.

This is a basic "starter" guide to teaching and learning in General Practice, and you would be more than welcome to join us on our teacher training courses (Training to Teach) to learn more.

This guide will give you information about

- the basic principles of enhancing teaching and learning in the community
- other sources to get further information and training
- a series of activities that provide you with evidence of reflective teaching practice that you could include in your personal development plan (PDP).

### How to use this guide

The guide is clearly laid out to enable you to choose the way you use it. Some may prefer to start at the beginning and read through, others may only want to pick out relevant chapters.

Each topic has a self-assessment exercise related to the common problems encountered by tutors, and we suggest you take a few minutes to think and write down your thoughts on dealing with this.

If you want, you can disassemble the guide and include the sections you have read and reflected on in your PDP.

This guide is meant to be brief; if you want to know more about various issues, a reference section is clearly highlighted.

Please note that this is a general teaching guide, and it cannot be used in place of a tutor's guide for particular courses or programmes.

### 1. Communication and social media

We encourage you to establish effective methods to communicate with students, such as sharing email addresses. We would ask you to let the students have a practice bypass number (or perhaps your mobile, if you are willing), so they can let you know about illness, etc.

Messengers (e.g. WhatsApp, Viber, Facetime, etc.) and social media can work well to arrange sessions e.g. meeting at a Nursing home, but both tutors and students need to remember not to share any patient's clinical detail.

It is also important to remember that exam results are confidential data, and students may not wish to share this with their group or tutor. It is not appropriate to share this information via group messages or social media. Any concerns about a student's academic progress can be raised and discussed with the course academic lead, which can be found on the MBBS Primary Care Medical Education webpage.

# 2. General Principles of Teaching and Learning

**?** Think point: What are the principles of teaching and learning that you consider important? Compare your list to the one below.

### Learning environment

Setting the right mood is very important, as this can help of hinder learning and information retention. Students like to feel welcome in the practice. Check that there are no burning issues that they would like to discuss first, and consider the need to set ground rules.

#### OK not to know

Allowing students to see our limits of knowledge helps them recognise their own limits of competence.

### Needs assessment

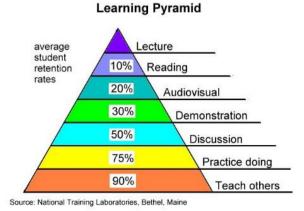
Find out what students already know about the topic first. This helps to pitch the session at the right level, and also aids learning. Long-term retention of knowledge is thought to develop by the formation of links between new knowledge and existing knowledge in the brain. Activating this old knowledge in student's minds at the start helps them to make these links.

### Aims and objectives

Give students a clear idea of what to expect by highlighting the aims/objectives and outlining a basic structure for the sessions. This may increase students' understanding and motivation.

### Active learning

It is far better to get the students actually doing, rather than telling them how to do things. Get them to see patients, present their findings, decide on what management they would choose and why. Then ask them to reflect on this, discuss their



decisions and ask them what they could do better next time.

### Constructive feedback

Feedback should be balanced, e.g. presenting some positive and negative points. However, when presenting negative points, try to focus on how students can improve, rather than stating what was not right. This is vital and covered on page 10.

#### Relevance

Motivate the students to learn by explaining how the skills learnt will be relevant for them both as medical students and doctors, whatever their speciality. Remember that assessment is a powerful driving force for students.

### Summarising

Telling them what you've told them at the end of each session is very useful to summarise what has been covered. This is called 'schema refinement', and helps long-term recall.

### Role modelling

Do not forget how powerful this is. Your student will be observing you and your interactions; it is an ideal opportunity to teach correct attitudes.

Action Point: Write down ideas you have for making your teaching more active for the students within your own teaching setting.

**Key tip**: Active learning means the students are thinking. This leads to a greater chance that this new knowledge will be retained. Thinking also leads to deeper level learning.

# Further reading:

- 1. Hutchinson L. ABC of Learning and teaching, Educational environment, BMJ 2003:326: 810-2
- 2. Bednar, A.K. Cunningham, D. Duffy, T.M. & Perry, J.D. (1995) "Theory into Practice" in Instructional Technology: Past Present & Future, 2nd edition by Anglin, G.J, pp88-101
- 3. Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Englewood Cliffs, NJ: Prenticve Hall.

# 3. Teaching a Skill

**Think point**: Think about a skill you have learnt. List the things the instructor did that helped you learn.

In the small group setting, you will be required to teach clinical examination skills. This is very likely to involve a demonstration, and observing students as they practice. This sort of supervision is invaluable to them; it is not unusual for you to be the only doctor to actually watch them doing it!

The old adage "see one, do one, teach one" can be expanded. Below are a few tips.

Why examine: illustrate what important positive and negative findings you are looking for, and how they affect your working diagnosis

**Find out** what they can do already, and how confident they feel about this; you can increase or decrease the challenge of the situation accordingly

**Demonstrate** – and talk your way through it

Chunks – break down complex examinations into smaller parts

**Practice**, practice, practice – to ensure transferability of the new skill by practising in different situations and with different problems

Feedback and correct any errors, but also ask students to reflect

**Reconstruct –** bringing back of the smaller chunks into the whole picture.

comp	Action Point pare it to our lis	t: List what a st.	good teacher	would do w	hen teaching	a skill and

### The Good teacher

- Tells them why a skill is useful
- Performs it from beginning to end
- Talks their way through, linking anatomy and physiology
- Breaks it up into smaller bits
- Gives everybody a chance to practice and get constructive feedback
- Provides many opportunities for practice
- Encourages critical thinking about interpretation of signs

**Educational opportunity:** It may have been a while since you performed a clinical examination in the same way as an undergraduate. It may be a good idea to watch one of the videos on clinical examination available for hire from the department or get another colleague to watch you

# Further reading:

- 1. Dent J. Harden R. 2001. A practical guide for medical teachers. Churchill Livingstone Chapter 8;pp 93-97
- 2. Teaching medical students in primary and secondary care 2003 Hartley S. Gill D. Carter F. Walters K. Bryant P. Oxford University Press

# **Taking a History**

**?** Think point: how do students take a history in their early years?

Students are given a lengthy list of questions to ask patients, including the "systems review". It should not really come as a surprise that in a clinical encounter they spend all their time trying to remember these questions rather than talk to the patient. Asking multiple closed (yes/no) questions is called the "exhaustive method" of history taking, and it tires the teacher from listening to it as much as the student from performing it.

Action Point ability to make a dia	you think could hel	p improve your students'

In this chapter, we will make a distinction between a consultation, which we see as a bigger holistic situation, and gathering information. Here our aim is to focus on aiding information collection and analysis.

There are two key ways to try and improve the clinical reasoning that goes on in a history taking setting.

Firstly, **pattern recognition**: In hospitals, students tend to see rare conditions, which naturally spark more interest for them and their colleagues. They also may not have the medical knowledge to know how things present and will not link diseases with epidemiology.

So in your teaching it's really useful to get them to see very common conditions again and again. Integrating the prevalence will help "common things happen commonly". Comparing and contrasting medical conditions, rather than listing features of one, also aids learning.

Secondly, we **introduce a theory**: Hypothetico-deductive reasoning. This is how experienced clinicians take histories.

It means that we ask questions, think of likely diagnosis, formulate further questions to test our hypothesis and ask again all within the consultation. Students don't, they ask, write down and come away with unanswered questions. They may miss important non-verbal clues as they are concentrating so hard to remember the questions.

Key tip: 2 mnemonics to help you aid the deductive powers of your students

**SSSTOP** – Symptoms, severity, situational factors, time course, onset and patient characteristics.

- Let the student take the history of the presenting compliant then stop them and get them to consider the above headings.
- Get them to plan what other questions they need to ask and let them experiment and try them out

### FWWWU - Follow Wee Willie Winkie Upstairs

- Focus ask student to summarise findings
- Wait let them finish their presentation
- What ask them what they think the diagnosis is
- Why why do they think that it is this
- Uncertain what things have they heard that make them uncertain?



**Educational opportunity**: Try videoing your own consultations and look at your own powers of deduction. Maybe review them with a colleague? Don't forget patient consent!

### 4. Feedback

**Think point**: Think back on the last time somebody criticised you. What were the things that would have made you consider a change in your behaviour and what aspects would have you dismissing all that person had to say?

The aim of feedback is to improve students' performance. If a student is upset by the manner in which feedback is offered then s/he will not be in a psychological state to benefit from it. There are some general principles for giving feedback listed below.

### **General principles for facilitating feedback**

- Address the behaviour and not the person: there is no point criticising things that can not be changed.
- Constructive rather than destructive: criticisms should be constructive and phrased as areas for improvement or targets they can work on for next time. So ensure the focus is on how they can improve next time.
- Balanced: consider the positive before the negative. It has been shown that feedback is more effective, if the student leaves feeling generally good but with some specific ideas for improvement. Therefore it is important to focus on positives, as well as negatives. One approach is the 'criticism sandwich' where you start with comments on what went well, followed by some areas for improvement, and end with some overall positive comments.
- Specific rather than general: it is especially valuable to give students specific examples of where they did particularly well or could improve, rather than general comments.
- Allow the student to start first: most of the time students will know where
  they went wrong, but will struggle to find parts where they did well. It makes
  your job a lot easier, and more comfortable for the students, if you allow them
  to reflect and give their own feedback on their performance first.
- Consider the timing: generally the sooner the feedback is given the better.



Action Point: Your student is having difficulties in communicating with patients, because they are using too much jargon. Outline using the principles of feedback, how would you deal with this?

**Key tip**: Your feedback is essential to promoting and shaping learning. It is probably the most important aspect of the course.

**Educational opportunity:** The "Rules of Feedback" can be applied anywhere, at home, at work, at play. Try them out!

# Further reading:

Gordon J. ABC of learning and teaching in medicine: One to one teaching and feedback. BMJ 2003:326;543-5

# 5. Teaching in the General Practice Consultation

**?** Think point: How can you teach and see patients in the surgery setting? What problems can you envisage?

Sitting in and observing a doctor is a very passive experience, with limited learning opportunities. It is important to balance your need to provide a clinical service with active teaching.

Compare your list to ours – we have added a few tips that may solve these problems

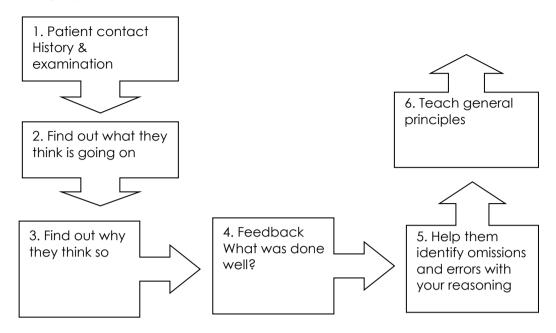
Problem	Tip
	If you have the room space, get the student to make the initial assessment of the patient. They will need supervision and feedback.
	Make use of the student, get them do blood pressures, listen to heart sounds, look up drug doses, etc.
Passive experience	Ask them what they would do next/what are they thinking, etc., and try to avoid something like "give me 12 causes of atrial fibrillation"
	Book "student surgeries" so patients know they are seeing the student first
	Get them to take your surgery whilst you observe and supervise them
	Find out what they want to learn, their current level of ability and plan a timetable accordingly
Unplanned	Opportunistic teaching – much of the clinical content will be unplanned, try and set a few objectives in advance with the student, for example, to look at the range of morbidity, prescription rates, the common presentations of the upper respiratory tract infection, etc.
	Allow them to take longer more formal histories with patients that illustrate good learning point
Unfocused	Try and provide aims and objectives but not too many of them
Conflict between	Try to book fewer patients in total, or give yourself longer appointment times.
teaching and seeing patients	Try to promote reflection and discussion remembering it does not have to be done immediately. The student could keep a log of queries.

Consent and confidentiality	Warn everyone that you have a student with you, it saves time if the patient is expecting a student to be there. A waiting room poster may be a very good idea.		
All your responsibility	Try to involve all the Primary Care team.  It's important that the student has a good grasp of who they are and they will be expert in other fields.		
All your responsibility	Share the learning with your other partners, a GP registrar also usually makes a good teacher as s/he is usually nearer students' age.		

**Key tip**: In this setting, you will be studied in detail by your student. You will have a powerful effect as a role model.

Action Point: It is here that students pick up ideas about doctors' attitudes to patients. Think back to a recent surgery and list the positive features you would have demonstrated.

# **Key tip**: "The one minute preceptor" model.



**Educational opportunity:** Try audio recording and analysing your consultations, like Byrne and Long did. Are you patient-centred in your consultations, are you student-centred in your teaching?

# Further reading:

- 1. Spencer J. ABC of learning and teaching medicine. Learning and teaching in the clinical environment. BMJ 2003: 326:591-594
- 2. Carter F. Berlin A. The clinical consultation as a learning opportunity, a practical education module for clinical teachers. <a href="www.clinicalteaching.nhs.uk">www.clinicalteaching.nhs.uk</a>

# 6. Small Group Teaching

**?** Think point: Can you define a 'small group'. What advantages can it offer to learning?

Many people concentrate purely on a numerical divide between small and large groups, and this obviously does have importance. However it's the amount of student interaction that is key to being a small group, as you can still lecture to two people!

# Why teach in small groups?

General Practice placements are organised in this way, because GP surgeries do not usually have space for more than six students. However, there is more to it than that.

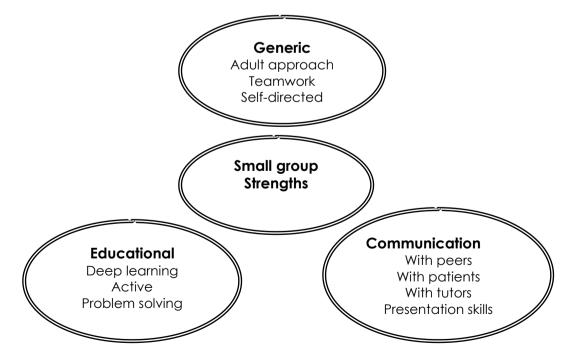
Teaching is in **protected time** and should combine:

- Focused history taking, with discussion and feedback
- Observed history taking and examination
- Brief topic based tutorials and case/topic presentations
- Variety of settings (surgery, patient's home or residential care)

In addition to this,

- Teaching can take place in the surgery, in the patient's home or in a residential setting.
- Small groups offer rich educational opportunities and are a mainstay of clinical teaching.

So what are the features of small groups that can make the learning opportunities so good?



**Student-centred**: learning is based on what the student needs to know rather than what the teacher wants to teach, e.g. by finding out students' learning needs, and tailoring the course appropriately. This is especially relevant towards the end of year, when student's abilities are much greater.

**Promoting deeper understanding**: by working in small groups and focusing around patient problems you are able to ensure that learning is not superficial. Use questions to clarify and ask students to discriminate and justify their responses. Make the learning as active as possible, and focus it around real patient contacts.

**Team working:** as doctors, we work in multi-professional teams, and this is a very important aspect of teaching. Make your students aware of this, encourage teamwork, get them to learn and work as a team, develop their feedback skills and peer assessment.

Other important areas as you work in teams (remember to include your patients in this definition):

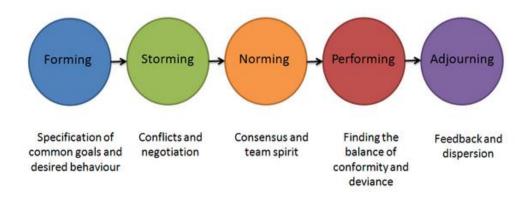
- assessment of professional attitudes
- getting active participation from the quieter members of the group

Attitudinal assessment is a major strength of small group work; often the GP tutor will be the one person that will have observed it first-hand.

### The developmental stages of a small group

We have mentioned some of the educational benefits of a small group. However, problems may arise, and it may be helpful to realise that the group has to evolve and go through five stages before it can "work":

- Stage 1 Forming: The meeting and getting to know each other
- Stage 2 Norming: Working out how the group is going to run
- Stage 3 Storming: Leadership of group established and merits of individual participants. This can be the time when you skills of facilitation are required most.
- Stage 4 Performing: The group starts to work effectively and a sense of belonging is developed
- Stage 5 Adjourning: End of task/process and dissolution of the group.



### The role of the tutor

Try to facilitate sessions rather than "lead from the front", encourage your students to identify and vocalise their learning needs, just as you should vocalise yours when they raise a question to which you are uncertain of the correct answer. It is important to show students it's OK not to know all the answers, and try to find the answers together!

It is your role to prepare the session, as we mentioned before, this is what your students appreciate the most.

It is also your role to create a friendly learning environment and valuing the individuals within the group.

During the session try to ensure the following eight attributes of an effective small group occur:

- All group members participate
- · Problem solving and clinical reasoning is prevalent
- There is vocalisation (questions, opinions, discussion, etc.)
- Learners interact
- Focus is on the task/activity
- There is a recap on progress
- There is good time management
- Feedback

### The role of the student

The student's role is to take an active part, work within the team and contribute.

# Methods for small group teaching

There are many techniques and tips for getting a small group interacting. We will only cover a few of the most practical ones here but if you're interested read McLeod P J and Harden R M (1985) Clinical teaching strategies for physicians. *Medical Teacher* 72: 173-89.

# Physical groupings

You will have groups of 4-6 students at a time. For some aspects of small group work this will be fine, but in certain instances you may want to work in sub units. A few examples are listed below:

 Patient interviews – usually best done in smaller numbers or if each participant is given a task. Some students become inactive without guidance, so for example ask a member to comment on communication skills, another on questioning skills, etc. • **Quiet groups** – your group may have only just formed and not functioning optimally. It might be a good idea to get them to talk in pairs and then feedback to the group. This would feel less threatening for students.

# **Teaching Methods**

- Clinical teaching this is the mainstay of clinical instruction. You can do it by "theme-ing" your sessions around clinical scenarios and inviting appropriate patients. It is excellent for teaching clinical skills, by demonstration and practice, but all domains relevant to clinical competence can be taught and assessed in this way.
  - For an example see the <u>lesson plan for the Neurology session</u> focusing on common neurological conditions.
- Problem-based learning instead of delivering information, set a clinical conundrum. Let the group discuss the problem and come up with solutions. In the medical school they are often expected to go off and research the topic but in the community this is not appropriate. However, you can easily highlight to them the areas for further self-directed learning.
- Brainstorming fun and quick way to get ideas, opinions or answers to questions, but remember to value all contributions. Some ideas will need to be explored further and it's useful to keep a visible record on a flipchart.
   An example may be "What factors cause falls in the elderly and why?"
- Games –a useful adjunct to a teaching session, and very handy in case a
  patient is unable to attend. There are many, and you can devise your own. For
  example, use a set of cards with a medical diagnosis and ask students to rank
  them in likelihood order on hearing an evolving patient story. A fun way of
  testing clinical reasoning!

# Further reading:

- 1. Jaques D. ABC of learning and teaching in medicine. Teaching Small groups. BMJ 2003;326:492-4
- 2. Dent J. Harden R. 2001. A practical guide for medical teachers. Churchill Livingstone Chapter 7, pp 74-81

# 7. Planning a teaching session and writing a lesson plan

In "Behaviour of effective teachers" (Irby, 1978), organisation and clarity of presentation were ranked number one skill for effective teaching, even above knowledge and enthusiasm!

- 1. Organisation and clarity of presentation
- 2. Enthusiasm and stimulation
- 3. Teachers' knowledge
- 4. Group teaching skills
- 5. Clinical supervision
- 6. Clinical competence
- 7. Modelling of professional characteristics

**?** Think point: So how are you going to plan a session? Do you have a structure?

A very easy structure to follow is **Introduction** ⇒ **Middle** ⇒ **Conclusion**.

Essentially, this means

- Telling students what you're going to teach or cover during this session
- Teach or cover the material planned
- Summarise main points taught or covered

Into each of those 3 subdivisions you will need to consider some other factors. Below are nine important aspects to incorporate into your lesson plan to make your teaching effective, according to Robert Gagné's "nine events of instructional design":

- Gain attention
- Inform the learner of objectives
- Stimulate recall of prior learning
- · Present the stimulus material
- · Provide learner guidance
- Elicit the performance
- Provide feedback
- Assess performance
- Enhance retention and transfer

We will now place these events into our structure

### Introduction

- **Motivate** your students to learn, highlight the importance and relevance of the session. Coming up in exams is always a good one if you're stuck.
- Mood get this right, a non-threatening environment where it's OK not to know the answers, and where students wouldn't be afraid to speak up and ask questions.

- **Objectives** Tell them what they will be able to do by the end of the session that they couldn't do before.
- **Content** Tell them how they will be achieving objectives.
- Stimulate previous knowledge "The most important single factor influencing learning is what the learner already knows." (Ausubel, 1968). Find out what they know by asking questions, or setting a patient problem for discussion.

#### Middle

- Vary the stimuli Our attention span is about 15 minutes. By varying the learning stimuli you can keep attention maximised. Mix information delivery with brainstorming, with practical sessions, presentations and discussion.
- Less is more This is self-explanatory, but an easy trap to fall into unless you remind yourself!
- **Check learning** just because you've taught it, it doesn't mean that's what has been learnt.

#### Conclusion

- **Summarise** Tell them what you've taught them, or ask them to summarise what was covered today, which would also help them remember it better!
- Sense of achievement do a little quiz, ask a question about patient care or get them to reflect on what they've learnt.

# 7.1 Sample lesson plan for an introductory session on Neurology

It's often easier to illustrate a point with some examples and this guide will contain two sample lesson plans illustrating Gagné's 'Nine events for instruction'.

Just before that a little bit on aims and objectives.

### Aims & objectives:

In summary, an <u>aim</u> is the broad-brush intention of the teaching programme. An <u>objective</u> is a more detailed statement of exactly what you intend the student to know at the end of that period of time. This may seem a bit basic, but makes an important point. Students learn best in smaller chunks, and if they know what they are setting out to do and how they are going to get there.

Below is sample lesson plan. The topic is how to take a history and examine a patient with a neurological condition.

Part of session	Content	Time	Resources
Introduction Motivate	Neurological problems are very common in later life. Making an assessment is vital and not formally taught anywhere else in year 3. Neurological problems still however come up in examinations. You will also need this skill for next week's session on falls.	5mins	
Mood	Get to know the students; explain whether it's ok to ask questions during or at the end of the session; tell them that they'd need to actively participate, etc.		
Objectives	By the end of this session you will be able to  • Take a neurological history  • Perform a neurological examination  • Describe the impact of a neurological disease in terms of physical, psychological and social impact	5mins	Flipchart/whiteboard Objectives
Content	Small group work re prior knowledge / history taking. Patient interview in pairs Observed examination /		

Prior knowledge	demonstration depending on competence Presentation of clinical cases by the pairs and plenary session  Reflections of patients with neurological conditions on ward/own	5mins	Flipchart
	experiences. Think about the steps in performing a neurological examination		
Middle	History section – common neurological conditions (prevalence and perspective). Think about hospital versus community balance. Patterns of common diseases and why – link symptoms to pathological process	30mins	Flipchart
	Patient interview and examination	60mins	Room space. Equipment Patient
	Examination practice	30mins	On each other or patient
	Plenary – case presentations and feedback	30mins (15mins each pair)	
Conclusion	Sense of achievement – performed an authentic examination	5mins	Flipchart
	Summarise key points  Revisit objectives – have they been achieved?		

### 8. Resources

### **Introduction to Teaching in Primary Care (ITTPC)**

A two-day multi-professional course comprising one taught, face-to-face day and an additional day of personal study.

This course provides participants with an introduction to the facilitation of student-centred learning. It includes a mix of theory and practical skills that can be applied in the workplace environment. Topics include learning needs assessment, skills for one to one and small group teaching, giving effective feedback and developing reflective practice. The course is interactive and multi-professional in order to help promote confidence in facilitating learners from across the healthcare professions.

**Training to Teach** – Teaching in the clinical environment

**ARENA Open** - UCL Arena Open is a welcoming and flexible programme of events and opportunities which focus on advancing research-based education at UCL.



You have now reached the end of this "taster" guide to teaching and learning. We hope that you enjoyed taking part in the various sections on principles, teaching history taking and skill acquisition.

Your feedback on this guide would be much valued, we would be grateful if you drop us an email with any ideas – pcphmeded@ucl.ac.uk.

Good luck and enjoy the teaching!