TEACHING IN PRIMARY CARE SETTINGS

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INTRODUCTION

GPs now carry out a lot of teaching, in fact teaching in the South-West of England has increased by over 350% in the last 20 years (Peninsula Education Working Group 2020 internal survey). This section is therefore for both teachers and for students who may consider getting more involved in teaching or near peer teaching. For students and teachers interested in this area, many Universities now offer modules, certificates or masters courses in medical teaching.

NEED TO KNOW

THE LEARNING ENVIRONMENT

The clinical environment is different from the classroom in almost every respect:

- Learners are not the only priority: they can find themselves ‘filtered out’ by busy clinicians seeing patients.
- No detailed learning objectives - these are unachievable due to service pressure and the fact that patient presentations cannot be pre-planned (1, 2).
- There are constant interruptions.

New clinical learners can be overwhelmed by this and find it difficult to learn or retrieve information - especially when they are also concerned about placement assessments. We suggest teachers therefore:

1. Try to limit question and answers about clinical factoids: ‘what the causes of x are’, ‘what anatomical structure x is’, etc.
2. Instead ask students what they are thinking/what they would do.
3. Explain what you (the teacher) is thinking.
4. Be aware that the service environment can disable student recall and performance - especially in the early years.
5. Carry out placement assessments as early as possible to enable students to then concentrate on clinical learning.

LEARNING STYLES

Some evidence suggests that we have a preferred learning style. Many different categories exist but the styles range from those who like to learn the theory to those who prefer practical learning (active learners).
The majority of clinicians and would-be clinicians are 'active learners' (3) and evidence suggests that for all learners, attention span falls very rapidly after about 15 minutes of inactive learning (such as a lecture). Some active teaching and learning techniques are listed below:

1. ‘Get out!’ If attention is flagging, then get out and have a break. An offer of a caffeinated drink in the health services is seldom unappreciated.
2. ‘Go and do something’ e.g. ‘look up the last condition we saw and give me a presentation in 10 minutes’.
3. ‘Go and have a look at the patient notes and give me a summary’.
4. ‘Try starting/finishing the next consultation - you can sit in my seat and I will watch’ (hot seating).
5. Using a topic or principle of general practice to tie together several cases; e.g. 1D Continuity of care. During the surgery try to note down how continuity affects the different patients seen.

The most important thing however is to remember that learners are human beings and respond to acknowledgement of their presence. All too often, observations of clinical learning reveal that learners can be ‘filtered out’ by busy clinicians. Basic acknowledgement practices such as ‘you ok?’ or ‘hang-on in there’ or even a friendly glance can have dramatic effects on student attention (2).

SOCIAL LEARNING

Part of learning to be a doctor involves learning how to act, speak and dress like a doctor. For this, generations of learners have looked to practitioners as role models. What clinical teachers say and do has a profound effect on students. This kind of learning is seldom consciously planned in medical school curricula and so is known as the hidden curriculum (4, 5). What is certain is that students are profoundly affected by negative comments about other healthcare professionals and find this behaviour upsetting. It is therefore not acceptable for clinicians to engage in negative comments - even in jest, about other health professionals.

Another part of learning a profession involves feeling a part of the profession. Some research (6, 7) suggests that this is a gradual process, with learners initially taking on routine tasks as ‘legitimate participants’ - before moving on to tasks with more responsibility - eventually becoming part of a ‘community of practice. The observations that originally led to this idea were based on old-style apprenticeships, which have ceased to exist at present in most undergraduate clinical education. This has meant that many students feel like a spare part on clinical attachments and feel very uncomfortable. Giving students a role at the practice is therefore a very good idea. Options include:

- Helping to summarise patient notes (this is usually paid, and students often perform this task in their holidays).
- Providing or coordinating patient transport in adverse weather.
- Doing flu jabs (students are often paid for this in the flu vaccination season).
• Performing routine health investigations (ECG, spirometry etc) as part of routine health monitoring.
• Phlebotomy and other clinical tasks - when suitably trained. See the SAPC website for more details on indemnity.
• QOF checks for patients located in nursing homes.
• Health promotion clinics (smoking cessation, lifestyle and weight management).

LEARNING FROM PATIENTS

It is not possible normally to predict what kinds of patients will come to a surgery and the strength of general practice is that many different cases are seen each day. How to structure clinical learning around this? Firstly, the bedrock of developing good clinical practice is for learners to see lots of patients (enabling pattern recognition to develop). The second main way in which clinical knowledge develops is through reflecting (see previous section) and thinking about clinical experiences and this can be greatly enhanced through receiving feedback on patients seen. The way in which feedback takes place is variable but a number of suggested methods exist:

The one-minute preceptor model (8)
This can be used in instances where a diagnosis has been made:
- Student clinical encounter/experience
- Get a commitment from the student - ‘what do you think the diagnosis is?’
- ‘What might be the underlying anatomy/physiology/pathophysiology here?’
- Probe underlying thinking – ‘why do you think?’
- Reinforce good - ‘your thinking is supported by…’
- Identify points to improve/omissions
- Try to relate to general principles (don't be afraid to use your own personal experience here) - ‘generally in these cases/I have found in general that…’

More commonly, the diagnosis is already known, and management decisions need to be taken regarding care and the following method may be more appropriate:

The 30-second teaching model:
- Clinical encounter/experience
- Clarify relevant factual knowledge
- Why do you think x happened/was done?
- Explain the clinical reasoning behind actions taken - how guidelines, etc. have been adapted to suit individual patients
- Signpost to further relevant knowledge/guidelines but also point out where individual care deviates from guidelines or where guidelines or textbook guidance do not exist/are inadequate.

Each clinical learning episode should be recorded by students in their clinical log so that the student and medical school can be assured that regulatory body (such as GMC) outcomes are being met.
LONGITUDINAL PLACEMENTS (LOPS)

For acute presentations of simple conditions, one consultation is normally sufficient. However, students returning to practices can benefit greatly from following up patients from a previous placement to review how conditions have developed. Time can often be set aside in placements to allow this activity to take place.

For chronic conditions (that now account for most clinical presentations), the current model of a one-off ‘clerking’ encounter is out of date (it has remained unaltered since the 1850s). Students need opportunities to learn how chronic conditions develop and in tandem with this, how the relationship between physician and patient evolves. This relationship has a profound effect on the eventual outcome of the condition (9).

A popular way of encouraging this to take place is for medical students to return to the same practice and to follow a panel of patients there. These are known as longitudinal placements LOPs in the UK (10), or Longitudinal Integrated Clerkships - LICs in America and Australia. The evidence base for this kind of learning is strong and compared with traditional short placements the evidence suggests:

1. More exposure to clinical cases and performing procedures (11)
2. Better liked by students (12)
3. Better empathy retention by students (13, 14)
4. Better relationships with teachers and patients (12)
5. The same performance on knowledge test scores (11)

Resources for these types of placements can be found in the appendix.

AN APPROACH TO TEACHING BASED ON THE TEACHING CYCLE

Traditional classroom teaching is based on a simple 3-stage process (17, 18) that has been used for many thousands of years in teaching.

The teaching cycle:
PLANNING PLACEMENT LEARNING & TEACHING

We have already seen that learning on placements is very different to classroom learning and so several adaptations are necessary to plan placement (or work-based) learning (WBL).

Firstly, it is very difficult to plan exactly what will happen at work, so having very detailed plans or curriculums is therefore frequently impractical (19). Focussing on a general theme for a teaching clinic or for a week is often more achievable (20, 21) and this resource has adopted this evidence-based approach and provides many such themes and principles.

General practice covers a vast canvas. It is very difficult therefore for teachers and learners to embark on a learning episode such as a clinic without an idea on what to focus on. It is therefore a good idea that the student and teacher agree together on a topic or theme before the learning session begins. Feedback from generations of students indicates that this ‘intro’ session is disproportionately important. Apart from agreeing on what is to be learned, a short introduction session could also cover:

- Brief introductions and greetings - learning is partly a social process and knowing the name of a student is disproportionately important. Many busy teaching practices now have a section of their intranet devoted to teaching - where student photographs, names and progress can be monitored by differing clinical teachers.
- The locations of toilets, tea and coffee, etc.
- Materials needed for learning - the medical workplace is a highly technical environment; dependant on computers. Students need access to computers and patient records, so passwords are essential. If students are sitting in on telephone consultations, then an additional pair of headphones or using speakers is essential. Students need a pen and A5 notebook - or a laptop/smartphone to make notes. When more extended explanations are given students can be encouraged to record this on their mobile devices. Evidence suggests that students often do not have access to the right ‘materials’ needed for learning - making them ‘technological refugees’ in learning environments (1).
PLANNING SELF DIRECTED LEARNING (SDL) TIME WITH STUDENTS

During every attachment, there will be down time for students between morning and afternoon surgeries. In addition, there may be SDL time built into student timetables. A popular theory of learning - Adult Learning (22), suggests that learners prefer to be treated as ‘adults’ and to play a part in choosing what they learn (leading to the idea of self-selected student units and periods of SDL in many timetables). However, evidence suggests that students need guidance in planning this time (2). Options for this time include:

- Working on the ‘theme’ for the placement - ideas for this are contained in each of the principles outlined in this resource
- Working on an audit or research project at the practice
- Working on panel patients or following up cases previously seen
- Some practices have designed resource packs of cases, ECGs, X-Rays for students to look at.

DELIVERING TEACHING

In contrast to the formal/planned teaching in classrooms, teaching on placements is informal and unplanned. However, several themes have arisen through student feedback about this kind of teaching:

- It is often better to keep any teaching at a simpler level and then progress towards increasing difficulty as student’s level of understanding becomes apparent. Teaching can then be orientated towards the students ‘zone of proximal development’ (23) - the point between what a student knows and what is not known.

- Informal teaching is unrecorded and can therefore be a place where teachers sometimes feel free to voice opinions regarding other members of the profession, other races and other cultures. This can be extremely damaging to student learning. In a similar vein, compliments to students about clothing and appearance can frequently be misinterpreted and are probably best avoided.

- GPs frequently get to know students better than most other teachers. Issues of professionalism can therefore emerge. It is not acceptable to let major breaches of student professionalism go unreported - whether by student of teacher. Many students and teachers alike harbour a concern about where this boundary falls. Here the adage ‘use the force’ emerges - a feeling that something is very wrong emerges almost immediately. Thankfully incidents like this are very rare.
It is increasingly important that clinical teachers adopt a professional approach to teaching. One way in which this can be done is to collect evidence of preparation, collection of evaluation and reflection on teaching and the evaluation received. Resources to help this, such as evaluation forms and preparation for teaching forms can be found in the appendix.

This evidence may also prove useful in appraisal, as increasingly, doctors are asked to show evidence of quality improvement in all aspects of work undertaken. Another way to 'professionalise' teaching is to consider one of the many certificate, masters or doctorate programmes in education currently offered at many universities.

**ASSESSING LEARNING & EVALUATION**

Assessment structures will vary from school to school and are not the subject matter for this book. The content of this resource however may serve as a useful blueprint for those designing assessments.

However, evaluation of learning is essential if teaching and learning is to improve. Evaluation is the process of collecting feedback (of limited use in itself) and then crucially reflecting on this information and planning improvements to teaching - much like the reflective cycle. There are three main types of evaluation:

1. **LEARNER-EVALUATION:**
   
   It is a GMC requirement of students to provide feedback about teaching and each practice should ensure that students give feedback after each placement. A drop box for students to leave feedback is worth thinking about, as students can feel pressurised to provide good feedback if forms are filled out and handed directly back to a teacher. A simple feedback form is provided in the appendix.

2. **PEER-EVALUATION:**
   
   From time to time it may be useful to have a colleague sit in and observe teaching. Some teachers use cameras or smartphones to record some of their teaching for this purpose and then share excerpts with peers.

3. **SELF-EVALUATION:**
   
   This is particularly valuable and may realistically be only a minute or so of reflection - and a short note. The teaching record in the appendix leaves space for this.
ACTIVE LEARNING

✓ Talk to your placement provider about what teaching medical students is like.
✓ Try and pick a small topic - revise the content of this section and try to put into practice.

FURTHER LEARNING

RESOURCES

• See the appendices for a range of resources to help learning in clinical environments.
• For a ‘funny’ look at some of the pitfalls in teaching medical students watch ‘Doctor in the House’ - A 1950s farce, that reflects the attitudes to teaching medical students present at the time.
• Learning medicine has been the subject of novels (‘The house of God’ by Samuel Shem and more recently 'This is going to hurt' by Adam Kay).
• Learning medicine has also been the subject of several ethnographies - where researchers ‘go native’ and follow round students observing how they learn. 'The Boys in White' by Howard Becker and ‘Making Doctors' by Simon Sinclair are excellent examples of learning ethnographies based on observations in the US and UK respectively.
• For beginner medical teachers an excellent place to start is the ABC of learning and teaching in medicine by Peter Cantillon (Wiley-Blackwell).

REFERENCES

The following resources have been developed in conjunction with SAPC Heads of GP Teaching. If you have any queries or questions regarding the resources on offer, please contact Prof. Joe Rosenthal or Prof. Alex Harding, Co-Chairs of SAPC’s Heads of GP Teaching Group.