COURSE ARTICLES

ANAESTHETISTS as EDUCATORS

The Royal College of Anaesthetists

FOREWORD

The Royal College of Anaesthetists

This series of articles accompanies and supports the Anaesthetists as Educators courses run by the RCoA. The articles cover key educational topics relevant to teaching and learning within the context of clinical anaesthesia. Each has been written and developed by a group of individuals who believe that their clinical and professional duties include offering high quality education and development of anaesthetists in the clinical workplace.

These articles are designed to increase your understanding of the learning environment that you inhabit, raise awareness of key topics that you may not have previously considered, encourage engagement with clinical education and promote the capability to foster learning in others.

The purpose of this series is also about developing yourself as an effective clinical educator equipped with the necessary toolkit that will enable you to meet, and evidence, your own professional development in relation to Postgraduate Medical Education in the UK, as defined by the GMC.

The specific learning outcomes contained within each article are mapped to the RCoA 2010 Curriculum for CCT in Anaesthesia, which has been used as a framework throughout. Progression through these articles and engagement with the learning activities, can act as evidence of your abilities, with respect to competencies specific to education and training. Employers can use this evidence during the processes of appraisal and revalidation.

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DELEGATE INFORMATION

The Royal College of Anaesthetists

These articles are designed to compliment the Anaesthetists as Educators courses. They offer the reader: topic synopses, activities, tasks, reflections and evidence of progression.

The RCoA 2010 Curriculum acts as a framework. However, each article is written from the perspective of the 'developing educator'. It is hoped that any grade or level of anaesthetist could make use of the material and find it both stimulating and challenging.

Each article includes:

- **Intended learning outcomes -** mapped to the RCoA 2010 Syllabus/Curriculum
- **Activities** - pre-course endeavours that mirror the **Basic**, **Intermediate** and **Higher** stages of learning employed by the RCoA 2010 Curriculum.
- **Tasks** - mini-assignments designed to spark interest, help link information to individual experiences and promote active learning.
- **Reflections** - intended to encourage deeper thinking and understanding of the subject.
- **Evidence of progression -** utilising the **Basic, Intermediate** and **Higher** stages of the learning framework offered by the RCoA 2010 Curriculum. It suggests opportunities that the reader might use to demonstrate the competencies required for appraisal and/ or revalidation systems.
- **Further reading** - key articles that act as signposts to further learning.
- **RCoA 2010 Syllabus Key -** listing the RCoA 2010 Curriculum *learning outcomes* appropriate to each article.

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Aims

The aim of this chapter is to give a brief history of formal postgraduate medical education in the UK from its inception in the 1950s to more recent changes, including modernising medical careers (MMC) and the overarching influence and direction of the GMC. In relation to Anaesthesia, the important governing bodies and their functions will be outlined including a reference to the educational roles within the specialty.

Intended learning outcomes

By the end of this chapter you should have a better understanding of:

1. The history and development of the structures and processes relating to Postgraduate Medical Education (PGME) in the UK (TM_HK_13).

2. The roles and responsibilities of educational agencies involved in educational quality assurance and governance (TM_HK_13).

3. The roles and responsibilities of educational agencies involved as competent authorities relating to PGME in general and anaesthesia in particular (TM_IK_09).

4. The formal responsibilities of clinical trainers (TM_HK_01) including the roles and responsibilities of Clinical and Educational Supervisors (TM_HK_07).

Activity

The interaction between the different governing bodies can appear intricate and complex.

Basic – Consider your role and position within the world of clinical education. Write down as many governing or influencing bodies that you know of on a blank piece of paper.

Intermediate – Ask yourself 'why are so many governing or influencing bodies involved in Postgraduate Medical Education (PGME)?' In relation to the above task, now try to draw connections between each body.

Higher – In reference to the diagram you are starting to construct from the above two tasks, consider the various roles or functions that each body might have. Try to list at least 3 of these roles under each heading or organisation title.

A short history of Postgraduate Medical Education (PGME) UK

The aim of Postgraduate Medical Education and Training in the UK has always been to develop high quality, skilled, caring professionals at the point of completion of a programme of training. As time has moved on, healthcare has become more complex, the standards of care more rigorous and the expectations of patients and public more demanding. In addition, the need for increasing formalisation of structure and process is evident along with the level of external scrutiny, quality assurance and regulation.

The 1950's

The **Medical Act 1950** (DoH 1950) formalised the requirement for PGME. It introduced a mandatory pre-registration year after graduation, the 'house year'.

The **Medical Act 1956** (DoH 1956) ensured that the General Medical Council (GMC), via its Education Committee, took statutory responsibility for medical education in the UK. Up until this point postgraduate education had still been left very much to the profession on a hospital/location basis and was predicated on an apprenticeship model.

The 1960's

The **Christchurch conference** (Williams 1985) was attended by all the major medical agencies, including the Colleges, Deaneries and UK Department of Health (DoH). They formally recognised all posts, from senior house officer (SHO) to senior registrar (SR), as training positions and directed that all National Health Service (NHS) hospitals should provide facilities for the continuing education of trainees.

The conference recognised the need for the coordination of training, through Postgraduate Training Committees, chaired by postgraduate Deans appointed by the faculty of a regional University. They also urged all consultants to recognise their responsibilities for training junior medical staff and students.

The 1970's

The GMC was given specific responsibilities, through its Education Committee, to oversee all phases of Postgraduate Medical Education. There were concerns with the pre-registration year and although many recommendations were made, most were never taken up. For instance, one proposal recommended replacing the House Officer year with a 2-year period of Graduate Clinical Training, with a corresponding reduction in length of the undergraduate course (See 'Unfinished Business' in the reference section for a modern day comparison).

The Medical Act 1978 (Kandiyali 1978) underlined the need for PGME by officially ending the notion that graduating doctors were omni-competent and instantly fit for independent practice.

The 1980's

The 1980 Education Committee of the GMC (GMC 1980) emphasised the need for *on-going learning* in its statement on the purpose of undergraduate training:

> '…to provide all doctors by the time of full registration with the knowledge, skills and attitudes which will provide a firm basis for future vocational training'.
>
> (GMC 1983)

Edinburgh Declaration

1988 saw the World Federation for Medical Education (WFME) call for a profound reorientation of the whole of medical education.
It set out 12 principles, see text box.

The 12 principles of the Edinburgh Declaration (WFME 1988)**:**

1. Relevant clinical settings.
2. A curriculum based on national health needs.
3. Emphasis on disease prevention and health promotion.
4. *Lifelong active learning.*
5. *Competency based learning.*
6. *Teachers trained as educators.*
7. Integration of science with clinical practice.
8. Selection of entrants for non-cognitive as well as intellectual attributes.
9. Coordination of medical education with health care services.
10. Balanced production of different types of doctor.
11. Multi-professional learning.
12. Continuing medical education.

Task

Think about the 'principles' that underpin medical education today.

- If you had to draw up *generic educational principles* what would they be?
- How do you think they might differ from those defined in the 1980s?

The 1990's - The Calman Era

In 1993, a summit entitled **'The Changing Medical Profession'** was held in Edinburgh bringing together leaders in medical education from around the world (WFME 1994). Underpinning this conference were the growing criticisms directed at the health care sector, the doctor as a professional, and at the medical educational system that produced them.

The summit recognised that although widely adopted in theory, implementation of the principles outlined in the Edinburgh Declaration of 1988 remained incomplete. The central notion that medical education should be viewed as a *continuum* remained imperative. A strategy was proposed to bring about the necessary changes in the structures, relationships, processes and outcomes of medical education to meet the changing face of medicine.

The most dramatic change to PGME was driven by the perceived inequality between the training UK doctors receive in comparison to their European Union (EU) counterparts. In fact, the UK actually demanded higher standards of training necessary for eligibility to the specialist registers.

The Chief Medical Officer (CMO) Sir Kenneth Calman chaired a working party to advise on the action necessary to bring the UK in line with EU law. They produced the report '*Hospital Doctors: training for the future*' now universally referred to as the '*Calman Report*' (Calman 1993) (See Figure 1).

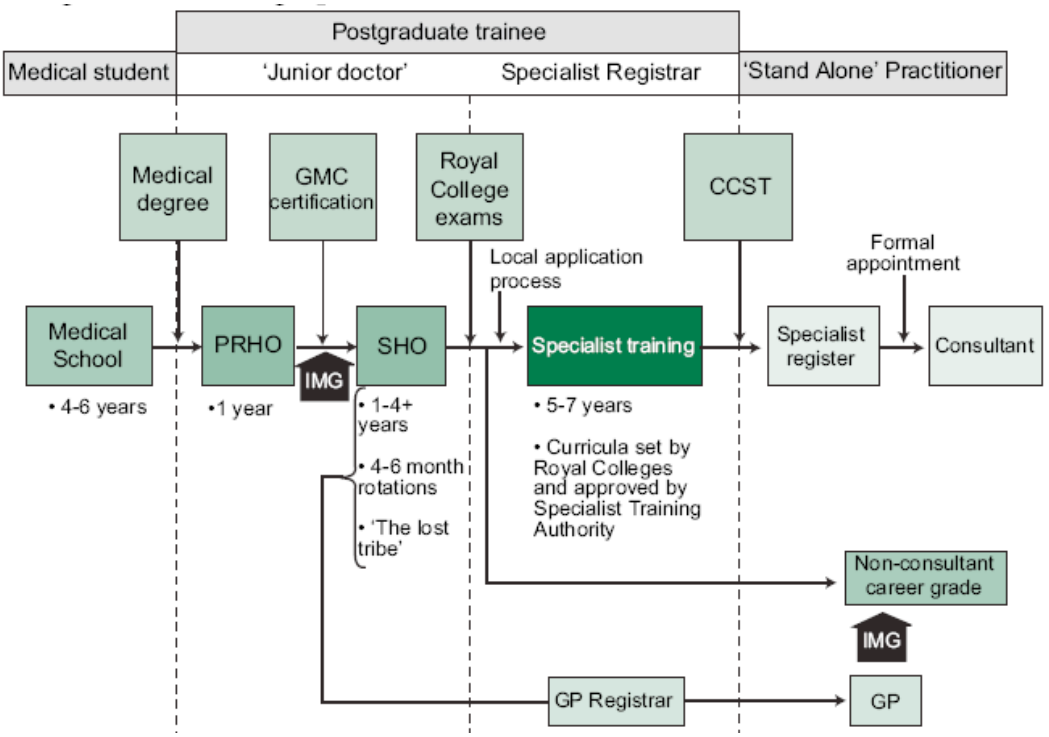


Figure 1: outlines the changes implemented following publication of the Calman report.

Summary: '*Hospital Doctors: training for the future*'

Restructuring of specialist training programs:

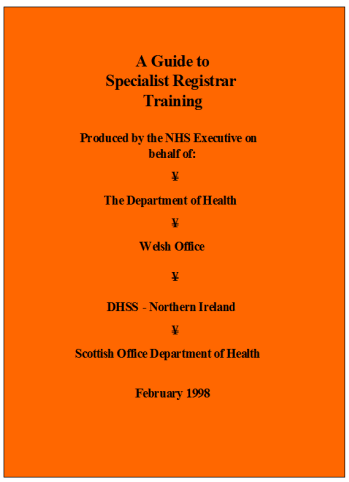
- Registrar & senior registrar grades combined - specialist registrar (SpR).
- Reduction in the length of training – 7yrs total.
- Defined starting and finishing points to training.
- Royal Colleges to provide structured curricula and specify the standards to be achieved in the delivery of training.

Certificate of Completion of Specialist training (CCST):

- Awarded by the GMC on advice from the appropriate College.
- Completion of training program to standard compatible with independent practice.
- Eligible for appointment to a consultant post.

All trainees appointed to a **Calman Programme** studied under a generic guide to training 'The Orange Guide' (DoH 1998). This book outlined all generic aspects of **SpR** training for all specialties. Each specialty then had their own specific requirements listed in the specialty curricula.

At the same time as changes to the structure of PGME were taking place, the Government tried to tackle the manpower issues. In 1993 the Joint Planning Advisory Committee accepted recommendations to develop a numbering system for trainees, programmes and posts within the NHS. From this point each trainee was given a **'National Training Number'** (NTN) (DoH 1998).



The Orange Guide

Principal features of a **NTN** were to:

- Provide each trainee with a personal, regional and specialty specific number.
- Enable central coordination and monitoring.
- Allow tracking of trainees' progress.
- Offer interchange of data between deaneries.

The 2000's - Competency based training

In 2003 competency based training was introduced across all specialties. It was felt that training should be based on the acquisition of competencies i.e. *knowledge, skills* and *attitudes* identified for each stage of training. Once all the appropriate competencies had been attained, the trainee could be signed off for a Certificate of Completion of Specialist Training (CCST). Training would be no longer be time based.

Every specialty had to produce a curriculum that was assessed by the GMC. The RCoA produced a curriculum detailing the modules to be completed, the competencies required for each and how trainees should go about achieving them.

Task

Think about the current RCoA curriculum:

- What constitutes a curriculum?
- What do you think is the difference between a curriculum and the syllabus contained within it?

Modernising Medical Careers (MMC)

The NHS Plan (DoH 2000), published in 2000, included a commitment to 'modernise the Senior House Officer (SHO) grade'. This was in response to the widely held view that there were many problems with the training at SHO level. These problems included: no clear educational or career pathways, no defined educational goals, no limit to time spent in the grade and a lack of distinction between service and training.

MMC was launched in February 2003 by the four UK health departments, after a report by the Chief Medical Officer called '*Unfinished Business*' (Donaldson 2002). A new system of recruitment and training was introduced. The first recruitment to the Foundation Years (FY) programme took place in 2005 and recruitment to Specialty Training (ST) first happened in 2007. It extended to all specialties, affecting all grades.

One of the intended benefits of Modernising Medical Careers (MMC) was to ensure a transparent and efficient career path for doctors. Trainees would exit Foundation training, gain a NTN in a Specialty Training Programme by competitive interview and then train for 7 years to become a consultant. This was to be seamless or 'run-through' training, (see Fig 2).

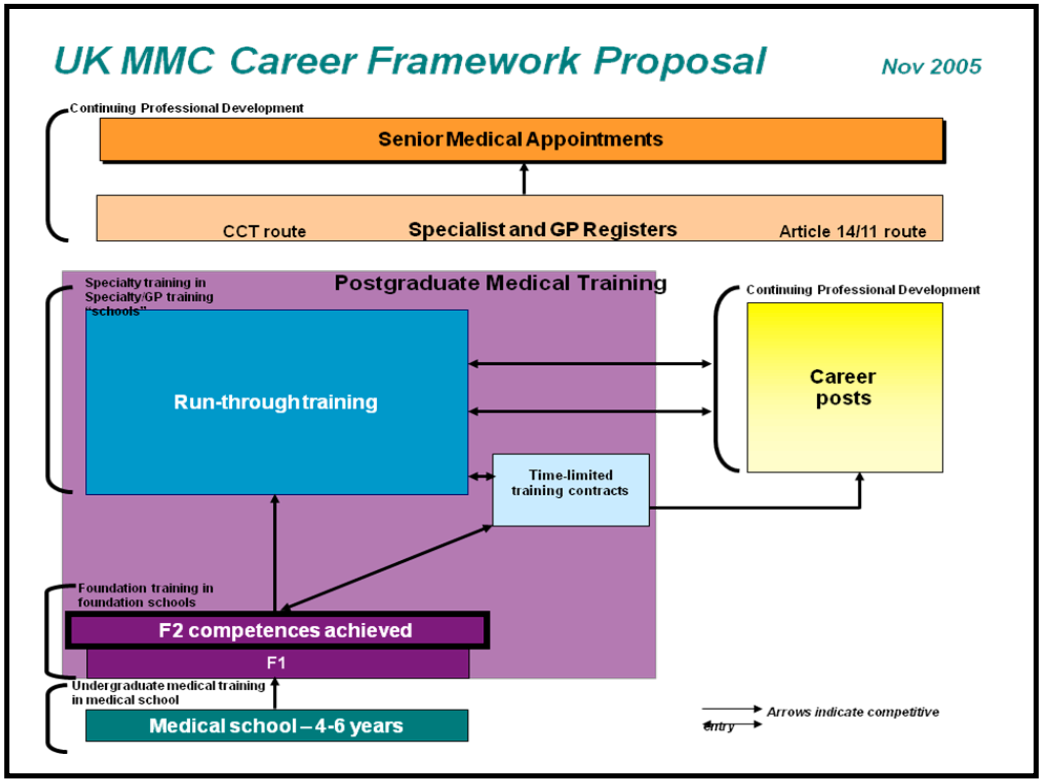
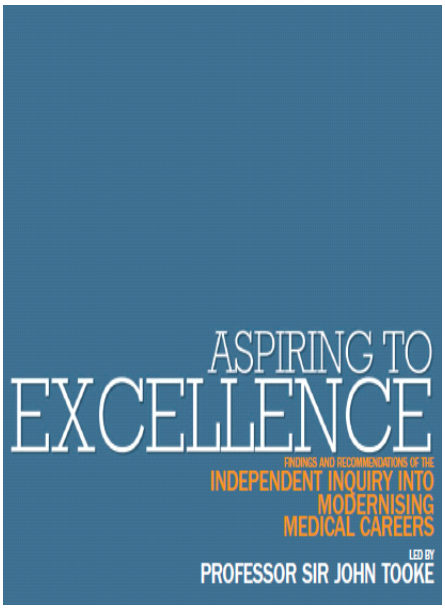


Figure 2: Framework for MMC career pathways.



Recruitment

Because of the failure of the Medical Training Application System (MTAS), used for recruitment in 2007 and the demands of the medical profession for a review of the new training system, an inquiry was undertaken resulting in the Tooke Report (Tooke 2007). This was a very detailed report that made a total of 45 recommendations.

As a result of the Tooke Report recommendations, many specialties including anaesthesia 'uncoupled' their training programmes. This essentially meant that there would be 2 years 'core training' (CT) equivalent to 2 years SHO training, followed by 5 years specialty training. Further information can be found at www.mmc.nhs.uk.

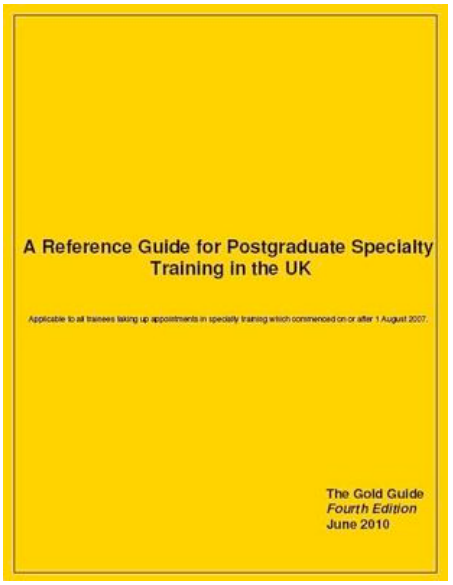
Task

The Tooke Report was published after the perceived failures of MTAS.

- What are your thoughts on the problems with the MTAS recruitment process?
- Read the Executive Summary and Final Recommendations of the Tooke Report.
- Do you think these recommendations have been addressed?

Gold Guide

All trainees, appointed from 2007 onwards, trained under the 'Generic Guide to Specialist Training' - the 'Gold Guide' (MMC 2010). This document was originally produced in 2007 for MMC and detailed the rules for all aspects of specialty training. There have since been several revisions including the addition of a Core Training supplement in 2008. The 2010 Gold Guide now governs all training in all specialties for all trainees appointed from 2007 and replaces all previous guides.



Educational Infrastructure: Roles and responsibility

Each Anaesthetic department has a training capacity related to patient population, trainer availability and services provided, dictated and sanctioned by the College.

A trainee belongs to a Training Programme, which might be part of a **School** or an **Academy of Anaesthesia**. The School or Academy is part of a Deanery. The Deanery funds 40hrs of a trainee's salary. The trainee is also employed to work in a hospital by the Trust (Eng) or Board (Scot), which pays for the *service* part of a trainee's job.

Trusts or Boards have a **Service Level Agreement** (SLA) with the Deanery to provide education and training that meets the standards laid down by the GMC. In some areas Trusts/Boards will have trainees from more than one Programme, School or Deanery.

Sessional Supervisior - All consultant anaesthetists who have trainees attached to them in any clinical area are Sessional Supervisors. They have direct responsibility for what that trainee does in the workplace while they are supervising them.

Named Clinical Supervisor - A trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee's clinical work and providing constructive feedback during a training placement.

Named Educational Supervisor - A trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified trainee's educational progress during a training placement or series of placements. The Educational Supervisor is responsible for the trainee's Educational Agreement.

All trainees should have an Educational Supervisor but this can work slightly differently between Schools. Some trainees may have a different Educational Supervisor every time they move Trusts or Health Board, others may have one Educational Supervisor throughout a stage or indeed throughout their entire Training Programme.

Educational Supervisors are responsible to several people including the College Tutor for the department, the Training Programme Director (TPD) and the Director of Medical Education (DME) in the Trust.

College Tutor - has overall responsibility for the education of trainees in the department, to ensure training happens, teaching occurs, assessments and appraisals are done and to sort any problems that may arise. The College Tutor is answerable to the College via the Regional Advisor. They are also responsible to the Deanery via the TPD and to the Trust via the DME.

Director of Medical Education (DME) - is responsible for the education of all trainees within their Trust and they oversee the running of Postgraduate Medical Education centres in each hospital. They are also responsible for the undergraduate students while they are doing clinical attachments in the Trust.

Training Programme Director (TPD) - has overall responsibility for the Training Programme, which is part of a School of Anaesthesia or Academy of Anaesthesia. Their role is to ensure the Training Programme is recruited to, runs to appropriate standards and provides the appropriate training to fulfil the RCoA curriculum. They also have responsibility for the Annual Review of Competency Progression (ARCP).

Governing bodies in medical education

A. Regulators

General Medical Council

The GMC has always overseen undergraduate training and the registration of doctors. It has also taken charge of the revalidation of doctors. It was felt that undergraduate and postgraduate training needed to be more 'joined up'. The GMC now has 3 boards: Undergraduate, Postgraduate and Continued Practice. The GMC has produced a strategy for the future of medical education (GMC 2012) and it has released new documents relevant to postgraduate training (GMC 2012):

- The Trainee Doctor.
- Standards for Curricula and Assessment Systems.
- Quality Improvement Framework.

Postgraduate Medical Education and Training Board (PMETB)

PMETB was set up as an independent statutory regulatory body in 2005 by an act of parliament (GMC 2009). It replaced the Specialist Training Authority (STA), which used to oversee medical education. Both were independent from the Colleges. The purpose of PMETB was to approve all training posts, specialist training curricula and assessments, quality assure and evaluate the management of postgraduate training and certify doctors for the specialist registers. PMETB was absorbed into the GMC on 1st April 2010 to produce one body looking after the continuum of undergraduate and postgraduate medical education and on-going maintenance of certification.

NHS Education for Scotland (NES)

NES are a special health board responsible for supporting NHS services in Scotland by developing and delivering education and training for those who work in NHSScotland. NES designs, commissions, quality assures and delivers Postgraduate Medical Education in Scotland.

Medical Education England (MME)

MME was set up in 2009 (MEE 2009) as an independent body to oversee medical education and training on a *national* level and also bring a coherent professional voice on matters relating to medical education and training. MME advised the Department of Health on how to address the multiple deficiencies identified by the Tooke report and they now provide professional advice on policy issues and workforce planning. MEE is accountable for England issues only. NHS Education Scotland (NES) provides education and training support for Scotland.

Health Education England (HEE)

Health Education England is a new national leadership organisation that will be responsible for the delivery of excellent healthcare and health improvement to patients and the public of England, by ensuring that our workforce has the right numbers, skills, values and behaviours, at the right time and in the right place. It will have five functions:

- Provide national leadership on planning and developing the healthcare and public health workforce
- Promote high quality education and training that is responsive to the changing needs of patients and local communities, including responsibility for ensuring the effective delivery of important national functions such as medical trainee recruitment
- Ensure security of supply, of the health and public health workforce
- Appoint and support the development of Local Education and Training Boards (LETBs)
- Ensure that investments made in education and training are transparent, fair and efficient, and achieve good value for money.

Deanery

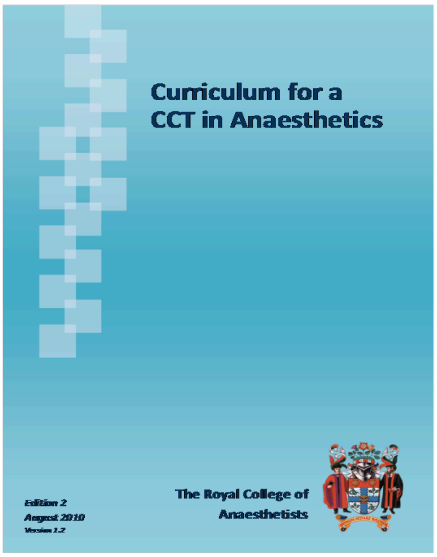
Currently each Deanery holds the budget and is also responsible for commissioning training from the Local Education Providers (Trusts or Health Boards). They are responsible for the National Training Numbers and manage the recruitment process. Deaneries are in charge of quality management and do annual quality assurance visits to Trusts. Each Deanery is set up slightly differently but usually has a Postgraduate Dean, a Deputy and a variety of Associate Deans. Their specific roles may vary from Deanery to Deanery.

B. Competent Authority

The Royal College of Anaesthetists (RCoA)

The College is responsible for the development of the curriculum (RCoA 2010) and ensures that this complies with the GMC's 'Domains of Good Medical Practice' (GMC 2010). The syllabus,

within the curriculum, lays out the *knowledge, skills* and *attitudes* that have to be attained at each stage of training to obtain a CCST. Every part of the curriculum can be assessed using examinations or workplace based assessments. The College sets the standards for these assessments. It also sets the specialty specific standards for training, by which Trusts and Training Programmes are judged. The College works with Postgraduate Deaneries to ensure that the curriculum is delivered locally.



The RCoA 2010 Curriculum contains the syllabus and describes how to achieve the competencies laid out within it.

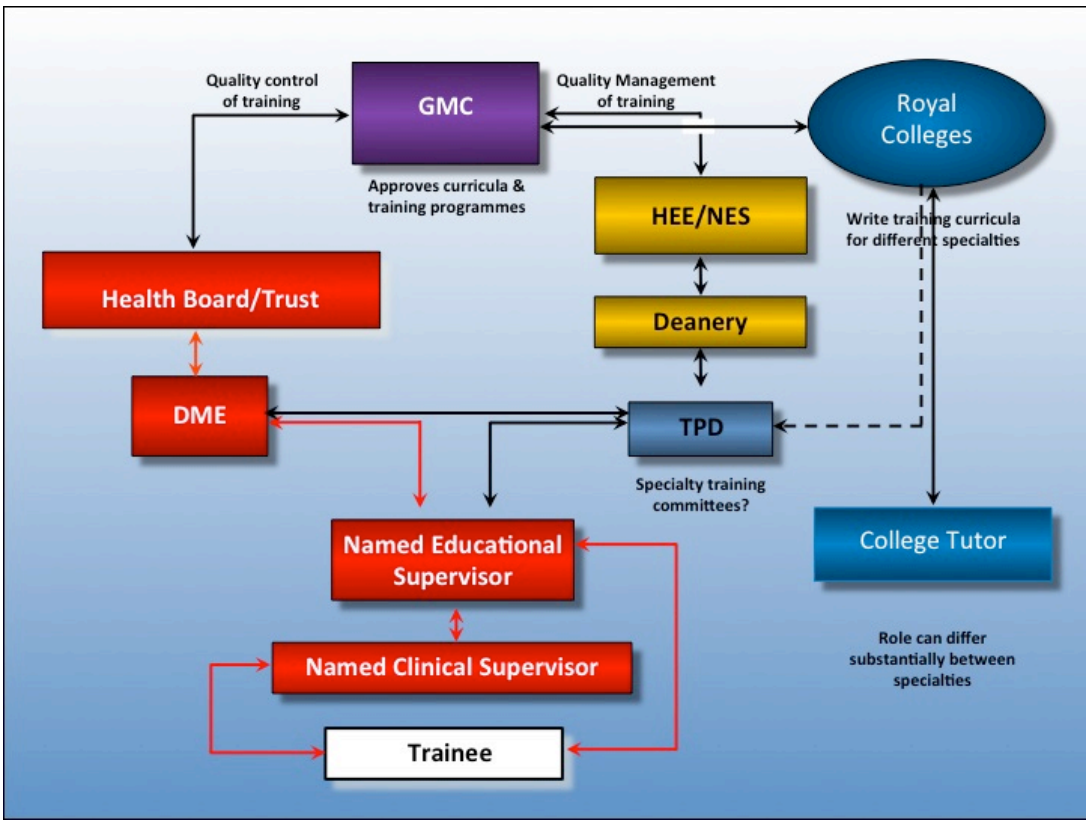
Reflection

Take a look at the 'Standards of Training' set out in The Trainee Doctor. How does your current training module match these standards?

How the College interfaces with the GMC and other agencies

The GMC approves all training posts using specialist advice provided by the College. The GMC quality assures and evaluates the management of postgraduate training and if there are problems, will seek the advice of the College and their expertise.

The college writes the syllabus and the assessments of competency, which then have to be approved by the GMC. Before a trainee can gain their CCST, they must apply to the College for approval of their training. The College then approves the training as fulfilling the requirements for the CCST and makes a recommendation to the GMC that the trainee be placed on the specialist register. A trainee has to have a CCT and be on the specialist register before they can take up a substantive consultant post.



Quality in PGME

The GMC has produced a document called 'Quality Improvement Framework' (QIF) (GMC 2010). This sets out how the GMC will quality assure (QA) medical education and training in the UK. The QIF was guided by 5 principles: Proportionality, Accountability, Consistency, Transparency and Targeting. It is believed that by coordinating quality assurance at all stages of training, the GMC will be in a better position to generate a comprehensive picture of medical education across the UK. There are three levels of quality activity: quality assurance, quality management and quality control.

Quality assurance (QA) is based on the GMC's statutory remit. It is the overarching activity under which both Quality Management and Quality Control sit. It includes all the policies, standards, systems and processes that are in place to maintain and improve the quality of medical education and training in the UK.

Quality management (QM) is the responsibility of medical schools and postgraduate Deaneries. It refers to the processes through which these bodies ensure that the training their medical students and trainee doctors receive from their Local Education Provider (LEP) meets the GMC's standards.

Quality control (QC) is, in turn, the responsibility of LEPs. They must ensure that the education they are providing meets local, national and professional standards.

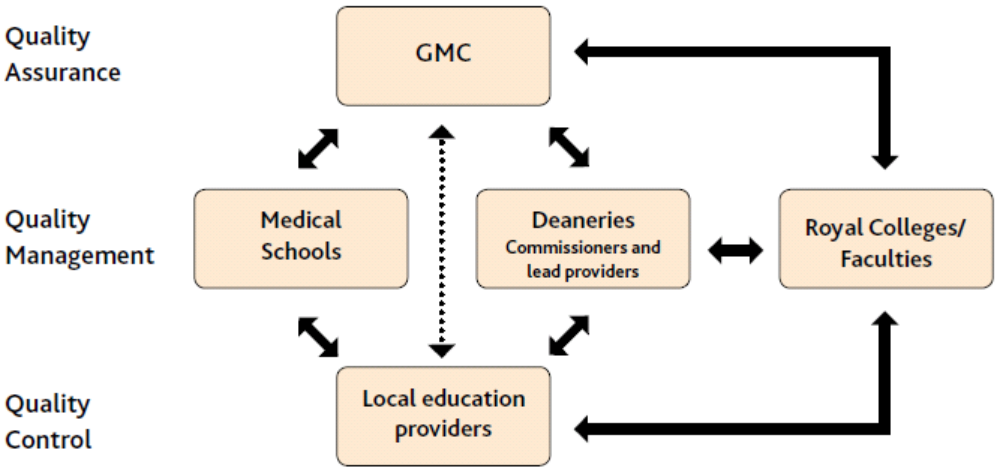


Figure 3: demonstrates how the different levels of QA, QM, QC relate to each other.

The future

There will be major changes in the way healthcare is commissioned. The Strategic Healthcare Authorities are being disbanded in favour of Commissioning Clusters. At present it is not known whether the Deaneries will continue in their present form and who they will be responsible to. It is likely that Medical Education England will become part of Health Education England (HEE) with a similar remit but looking after the wider healthcare workforce not just the medical workforce.

Key thoughts

The structure of medical education and training in the UK is in a state of constant evolution. At times it can appear confusing, but it is important to know a little about the origins, current roles and responsibilities and the future developments of key educational agencies. It is also useful to understand how you as a teacher and learner fit into the current framework and where best to find key information relevant to your current situation.

Evidence of progression

Basic level

- Look at one of the websites listed in the bibliography. Go to the 'documents and policies' section and *click* on one that interests you. Read the executive summary pages and try to reflect on how it might impact on your day-to-day teaching and learning.

Intermediate level

- Identify a consultant in your department who has a key educational role. Discuss his or her responsibilities within the department and how this fits in with the Deanery and College.

Higher level

- Write a reflective piece (200 words) on how the relevant bodies *quality* assure medical education. As clinicians, what is our role in this process?

Further reading

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RCoA 2010 Syllabus Key

TM_IK_09 Explains the roles and responsibilities of educational agencies involved in postgraduate medical education.

TM_HK_01 Understands the formal responsibilities of clinical trainers.

TM_HK_07 Explains the roles and responsibilities of Clinical and Educational Supervisors and Consultant/SAS trainers.

TM_HK_13 Explains the roles and responsibilities of educational agencies involved in educational commissioning and governance including, but not exclusively: the GMC, the DoH, Deaneries, Colleges and NHS Education Commissioners.

Aims

This chapter outlines some of the strategies used to optimise adult learning opportunities. It highlights the need to take an active role in your own teaching and learning and why this can benefit both individual learners and a department of clinical educators and trainees.

Intended learning outcomes

When you have completed this chapter you should be better equipped to:

1. Take responsibility for your own learning by identifying your individual learning needs, setting personal goals, seeking feedback and critically reflecting on practice (TM_BK_05, TM_BS_10, TM_IK_01, TM_HS_04).

2. Understand the need for active participation, assessment and evaluation in teaching and learning (TM_IK_02, TM_IS_02, TM_HK_08, TM_HS_02).

3. Utilise and reflect on different approaches to teaching and learning to provide effective learning opportunities (TM_BS_09, TM_IK_05, TM_HK_04, TM_HK_11, TM_HS_16).

4. Enhance and improve educational provision (e.g. local teaching) through evaluation and reflection of own practice (TM_HS_11, TM_HS_12, TM_HS_24, TM_HS_25).

5. Participate in developmental conversations showing consideration for emotional, physical and psychological well-being (TM_HS_03, TM_HS_18).

Activity

Consider all the anaesthetic departments you have worked in during your training so far. Identify one where you felt you learnt a great deal and compare this to a department you would prefer not to visit again?

Basic – Write down examples of the experiences you had in each place. Now try to unpick why they were such different experiences for you.

Intermediate - What are the key characteristics of a department that actively engages in teaching and learning?

Higher – What strategies might *you* be able to implement in a department where you felt teaching and learning could be improved? What challenges might you face?

Background

We all have a role in creating a department or clinical team that offers a positive learning environment because education in the workplace is about learning ***with*** and ***from*** others – a classical apprenticeship model. A team member feels valued if his or her opinions are respected and they are included in the ***process*** (see Figure 1). One of the current challenges for our healthcare system in the UK is to create a positive learning **environment** in the face of financial constraint, organisational change and restricted hours legislation.

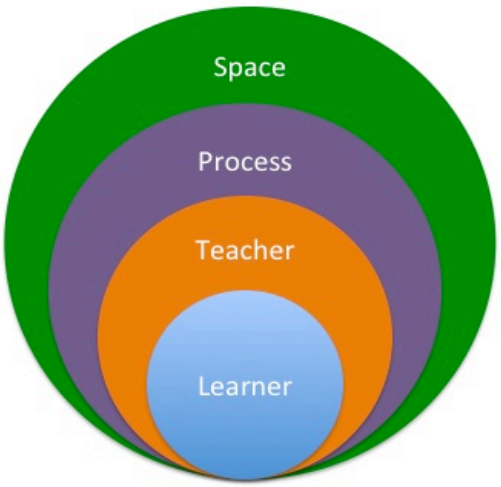

Figure 1. Demonstrates the central role of the learner within the learning environment.

A. A positive '*space*'

The learning environment is both a physical structure but also an emotional and intellectual entity. Maslow (1943) suggested that in order for individuals to achieve their full potential, a range of basic needs have to be met first. Figure 2 shows the 'Hierarchy of Needs' that motivate us. Needs must be addressed and met in turn and only when our physical needs and emotional well-being are satisfied, can we move onto the higher order needs of 'self-actualisation' such as personal growth, self-fulfilment and realising personal potential.

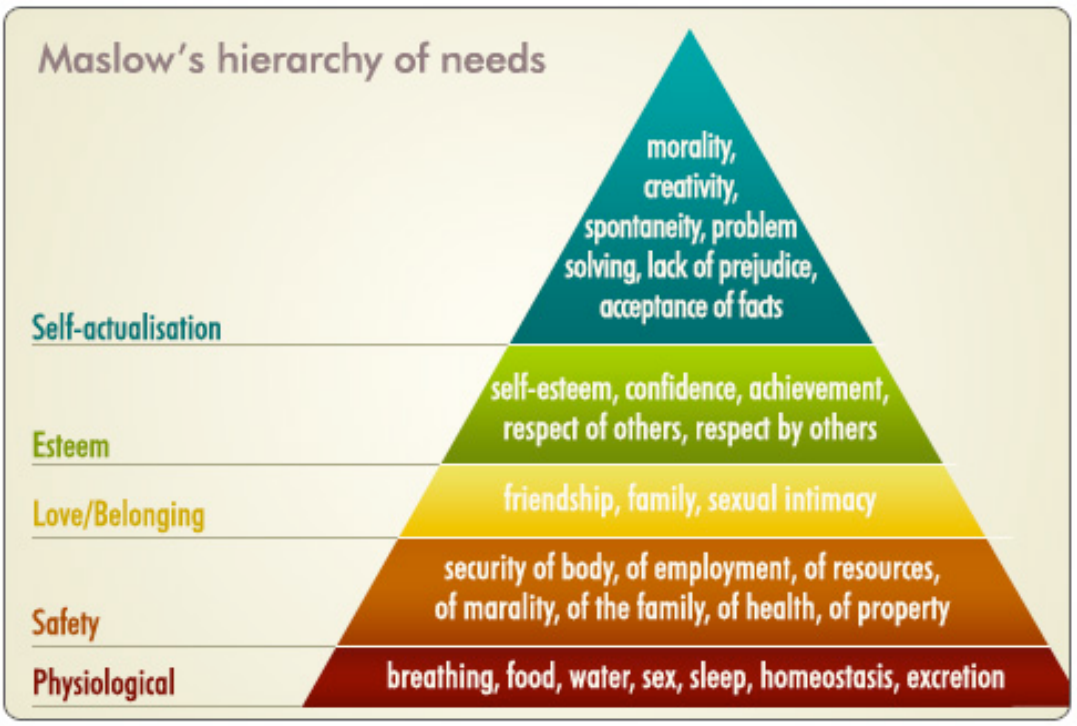

Figure 2. Maslow's Hierarchy of Needs.

Physical space

Infrastructure - The resources available to a department can make a large impact on learning. Trainees and consultants alike need changing rooms, lockers, and a pigeonhole, somewhere to obtain and eat food and drink, workspace and computer access.

The educational importance of a communal space (e.g. coffee room), where individuals can interact, should not be under estimated. These spaces offer learners the opportunity to meet and discuss clinical encounters, share ideas, canvass opinion and debrief in an open and relaxed forum.

Organisation - a hospital induction process can sometimes be uncoordinated, tiring and often too generic. Most would agree that a robust initiation into corporate, hospital and local policies and procedures is necessary to ensure a matching of expectations and sharing of critical information.

Imagine if you were not met on your first day, no one showed you around the theatre complex or showed you how the department's particular anaesthetic machines worked. Meeting colleagues, or more importantly the department coordinator, joining the coffee club and finding out when departmental teaching happens, are all part of knowing and feeling comfortable in your working and learning environment. These are all components of Maslow's lower order needs.

People - Having colleagues with similar ideas, experiences and goals can give an individual a

sense of belonging. Learners are motivated through inclusion and consultation. Work and learning are enhanced if we feel we are a respected part of a team, have a useful role and feel our voice is heard.

> **Reflection**
>
> Spend a moment thinking about your current hospital.
> Does it fulfil Maslow's lower order learning needs?

Intellectual space

Motivation - is a key factor in adult learning. It can arise from intrinsic and extrinsic sources. Their previous experiences, internal pressures and future use or relevance can influence a learner's intrinsic motivation.

Assessments are usually strong extrinsic motivators for learning, but they do little to inspire intrinsic drive and can lead to demotivation and disengagement. Other factors that reduce motivation include: unhelpful attitudes, distractions, hunger or lack of sleep.

The teacher's role in motivation should not be underestimated. Demonstrating enthusiasm for the subject matter and an interest in the learner's experiences, thoughts and ideas, can all help to maintain attention and improve knowledge and understanding.

Safety - learners need to feel *safe*. This will help them to experiment, reveal their lack of knowledge, ask questions and stretch themselves. By endorsing a learner's level of knowledge we can create an atmosphere of respect conducive to learning.

Belonging - through inclusion and consultation, we feel part of the learning process. Learners should be involved in setting ground rules, in decisions about content, the teaching methods used, feedback and evaluation. It is as important to discuss the above elements with a learner as it is for them to feel involved in the teaching session itself.

Self-esteem - safety, belonging and respect all lead to building confidence in a learner. With teaching comes a level of responsibility because praise, appreciation and constructive feedback can all be unravelled with the delivery of one thoughtless comment. The teacher-learner interaction is as pivotal a relationship as that which exists between clinician-educator and patient and must be balanced to allow both to flourish – neither at the expense of the other. Some find it difficult to translate their clinical dexterity into the educational setting, which is why teaching, like any other skill, has to be learnt, developed and perfected through practice.

B. The *process* of learning

All doctors are expected to contribute to teaching and learning as part of their professional duties (GMC 2006). The GMC document 'Continuing Professional Development' (GMC 2012) outlines the principles for career-long learning for all doctors:

- Responsibility for personal learning
- Scope of practice
- Individual and team learning
- Identification of learning needs
- Reflection
- Outcomes

The above principles can also represent the *process* of a learning encounter. Below outlines one example of how to structure an approach to an educational episode:

a. Identify learning needs
b. Set goals
c. Encounter (= the 'teaching')
d. Seek feedback
e. Evaluate experience
f. Critically reflect on learning

Task

Imagine that you are going to repeat a recent learning encounter (you could have been either the learner or the teacher).

Using the headings given above, structure the learning encounter. If these elements were covered, try to improve upon them; if they were omitted, offer ways that they could have been integrated.

C. Teacher

A teacher or facilitator is one of the most influential variables in the learning environment. The learner consciously observes actions and attitudes but probably absorbs much more subconsciously. It is important to recognise the enthusiasm that a learner brings and help them take advantage of all learning opportunities within the clinical environment.

The challenge for any teacher is becoming reflectively competent – i.e. teachers must unpick the skills and abilities that they demonstrate in clinical performance.

Task

Identify a teacher who facilitated your learning.

- Try to list 5 qualities they possessed.

Think about your next teaching encounter.

- How might you emulate the above qualities in this session?

D. Learner

Every doctor's Continued Professional Development includes career-long learning and this takes effort. Adult learners are expected to utilise opportunities, take responsibility and effectively manage their own learning. Understanding and adjusting to this transition from school and university is challenging for some individuals.

Be proactive - offer to help improve the department's structured teaching programme. If one does not exist, then take the initiative and organise it yourself. Be enthusiastic and actively participate in the educational life of your department. If you think a teaching session has not been useful, help to change it into something better, and give teachers constructive feedback.

Key thoughts

A positive learning environment is dependent on several factors, but a crucial step is to engage the learner. Engagement is affected by everything from physical surroundings, context and learning and teaching styles, to the intrinsic motivation and perception of relevance for the learner. Get all these right and you and your colleagues will reap the rewards.

Evidence of Progression

Basic level

- For your education portfolio, write a personal learning plan for the next two weeks.
- Prior to your next theatre list, identify your own learning needs. Explain these to a colleague or your anaesthetic assistant.
- At the next organised teaching session, observe the physical environment. How was it conducive to learning? Could it have been improved? What were the room's limitations?

Intermediate level

- Organise a teaching encounter. Set the learning outcomes, deliver the teaching, seek feedback and evaluate the session.
- Now write a 200 word critical reflection of your efforts to add to your learning portfolio.
- Attend an education workshop dealing with learning and teaching styles.

Higher level

- Expand your education portfolio. Teach in a variety of different environments.
- Conduct one of the departmental teaching sessions. Structure it and request feedback. Ask a colleague to formally assess your teaching skills.
- Have a developmental conversation with a colleague. Use active listening skills and open questioning to discuss a professional dilemma.

Further reading

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RCoA 2010 Syllabus Key

TM_BK_05 Understands their preferred approach to their own learning.

TM_BS_09 Keeps a reflective portfolio of learning and clinical practice.

TM_BS_10 Appropriately solicits and receives feedback from others regarding their own clinical knowledge, skills and behaviour.

TM_IK_01 Knows how to design and implement a personal learning plan for an educational activity related to their own learning.

TM_IK_02 Understands the importance of demonstrating respect for learners.

TM_IK_05 Understands which teaching method to select for effective learning in a variety of situations.

TM_IS_02 Creates good opportunistic clinical learning opportunities for others.

TM_IS_08 Performs a self-critical review of his or her own educational practice (workplace based teaching, tutorials, simulation training or lectures).

TM_HK_04 Understands how to use a wide range of educational methods to provide effective clinical learning opportunities, such as: opportunistic workplace-based training, lectures, part- and whole-task simulator training, full immersion high fidelity simulation, audio-visual feedback and behavioural debriefing.

TM_HK_08 Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment.

TM_HK_11 Explains the importance of their own behaviour as a role model for more junior trainees.

TM_HS_02 Creates good learning opportunities to deliver the curriculum.

TM_HS_03 Shows consideration for learners including their emotional, physical and psychological well being with their development needs; acts to endure equality of opportunity for students, trainees, staff and professional colleagues.

TM_HS_04 Identifies the learning needs of trainees.

TM_HS_11 Is able to lead departmental teaching programmes including journal clubs.

TM_HS_12 Encourages discussions with colleagues in clinical settings to share knowledge and understanding.

TM_HS_16 Receives feedback appropriately for the purpose of self-improvement.

TM_HS_18 Conducts developmental conversations as appropriate e.g. appraisal, supervision, mentoring.

TM_HS_23 Show willingness to take up formal training as a trainer and responds to feedback obtained after teaching sessions.

TM_HS_24 Demonstrates a willingness to advance own educational capability through continuous learning.

TM_HS_25 Acts to enhance and improve educational provision through evaluation of own practice.

Aims

Small group teaching is extremely common in both undergraduate and postgraduate medical education. In this chapter, we will consider the characteristics of different types of small groups, how to effectively deliver education in this setting, and some of the challenges a small group can present.

Intended learning outcomes

By the end of this chapter you should be able to:

1. Understand the educational principles behind small group teaching (TM_HK_05).
2. Identify the characteristics and effectively manage different types of small groups (TM_HS_05).
3. Plan, deliver and evaluate a small group teaching session relevant to your area of clinical practice (TM_IS_03).
4. Anticipate, identify and possess strategies for dealing with difficulties that may arise in small group teaching (TM_HS_11).

Activity

Small group teaching is a very common educational modality in clinical medicine.

Basic – Identify the different situations where small group teaching occurs. How are these situations similar? Why are they different?

Intermediate – List some of the key characteristics of each kind of small group. What will the group dynamic be like for each?

Higher – How might you alter your educational approach to suit each kind of small group?

Background

Small groups are recognised as being a highly effective way for adults, and in particular for professionals to learn. Individuals should bring a clear sense of purpose and direction to their learning and in this setting the teacher usually takes on the role of *facilitator*.

A facilitator uses *open* questioning to guide discussion and moderate the involvement of all participants. This encourages a much more interactive process which, by discussion and debate, promotes understanding. However, it is important to remain adaptable, as different groups will have different requirements and need different skills from their teacher or facilitator.

Examples

Small group teaching methods are utilised, not only in the everyday clinical environment but also in more formal learning settings (Gunn 2007). Some examples of common small group encounters include:

Tutorial: Traditionally seen as a mechanism for a teacher to impart information to a small group, whilst offering the opportunity to ask questions and discuss points of interest.

Seminar: Forum for discussion of topics that may be new or developing. Learners often present alternative viewpoints to one another.

Workshop: Similar format to a seminar, but traditionally where the aim is to create a new piece of work or discover fresh information. Now also used when teaching a skill or clinical topic.

Journal club: Presentation of published literature with the purpose of inviting comment and group debate. No one present needs to be an expert on the topic itself.

Reflection

Think about occasions when you have been part of the above types of small group teaching. Which suits your teaching and learning styles most? Try to explain why this might be?

Characteristics

There are many factors that can be used to characterise a small group. Consideration of these elements will help determine not only the content of a teaching session, but also the *process* by which learning is achieved. For a small group teaching session to be effective, both the teacher and learners should have an awareness of these factors:

Group size: Conventionally a small group is between 3 – 12 participants in size. The size of the group will affect the characteristics described below i.e. dynamic of the group and the fluidity of discussion amongst group members. Group size will influence the teaching style and delivery method chosen and may even rule out small group methodology as the most appropriate modality.

Group dynamic: There are many theoretical models describing the interactions of learners with each other and with the facilitator and the roles that learners will assume in a small group. For example, in the clinical environment, seniority and specialty may alter a group's dynamic to as much an extent as the personalities of the individuals themselves.

Some learners may view a session as an *assessment* rather than a learning opportunity. This may alter the amount individuals are willing to contribute (and risk getting it 'wrong'). It is important that the group facilitator has an appreciation of these issues and aims to positively influence a group's dynamics.

Discussion style: Can broadly be either *convergent* (or closed or teacher-centred) or *divergent* (or open or learner-centred) (Brookfield 1999).

In a convergent session, the facilitator acts as the conduit through which discussion and ideas flow and the dialogue occurs between him or her and each learner. With a moderate amount of practice, most facilitators are able to control the direction of discussion and reach a pre-determined end-point. This style is most suited to imparting new knowledge or delivering a prescribed syllabus within a fixed time frame.

Question styles used in a convergent setting tend to be described as closed e.g. "what are the main predictors of a difficult airway?" The discussions tend to impart some knowledge, review what is known and are focussed on areas where there is a definitive answer or end point.

In contrast, with a divergent discussion style, the dialogue occurs between learners and they voice their opinions to each other. Discussion may not follow the expected direction and a different end-point may well be reached. Divergent sessions are often considered to be more challenging to effectively facilitate (and to time-manage), but when the dialogue provides its own momentum it can often yield some of the most rewarding discussions.

Here the question styles are more open e.g. "what are your views on DNACPR?", where the discussions are opinion based, and may not yield a final definitive answer. The learning happens for an individual by being part of the process of discussion and debate.

Structure – bringing life into your teaching

Breaking a larger group into smaller units can encourage group interaction. Organising these on a heterogeneous or random basis will prevent cliques forming. Different structures will require varying amounts of leadership from the facilitator but once established, may require you to step out of the discussion and allow the process to determine the direction of the session (Jacques 2011).

Buzz groups: Students are asked to turn to their neighbour to discuss a question for a few minutes, see Fig 1. This offers a sense of participation and enables students to freely express ideas they would have been unwilling to reveal to the whole group. A variation is to permit only one-way communication initially, allocating half the allotted time to each individual within the pair. This can help each individual to develop their own ideas and enhance the other participant's active listening skills.

Snowball groups: or pyramids are an extension of buzz groups, where pairs join up to form fours, then fours to eights, until the whole group reports back to the facilitator. This developing pattern of interaction can ensure comprehensive participation. The tasks should become increasingly sophisticated as the groups amalgamate to limit repetition and boredom.

Fishbowls: An inner group discusses an issue or topic while the outer group listens, looking for themes, patterns, and the soundness of arguments, see Fig 2. The outer group then offers feedback, not only on the material and the ideas discussed but also critiques the inner group's dynamic. The two groups then swap over roles.

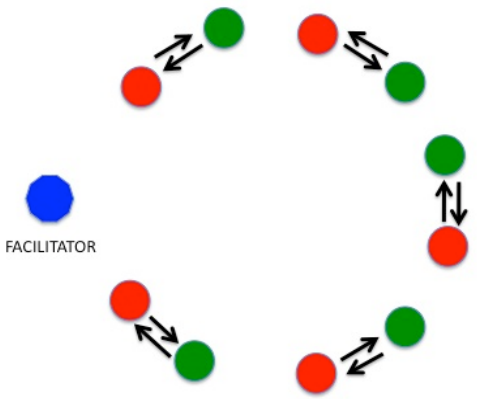

Figure 1: Buzz groups

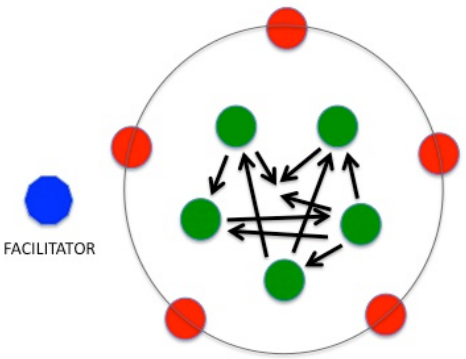

Figure 2: Fishbowls

Crossover groups: Students are divided into subgroups that are subsequently split up to form new groups in such a way as to maximise the crossover of information.

Circular questioning: One group member formulates a question relevant to the discussion topic or problem and puts it to another person, for example to the person opposite them. After sufficient time has been given to develop an answer, the answering individual then asks the next question to someone else, until everyone has contributed. At this point the whole group can review the questions and answers to develop the discussion further, see Fig 3.

Horseshoe groups: This method allows the focus of attention to alternate between the lecture and discussion formats, a common practice in workshops. Groups are arranged around tables, with each group in a horseshoe formation with the open end facing the front, see Fig 4. You can then talk formally, for example from a white board, before switching to a group task such as discussion or problem solving.

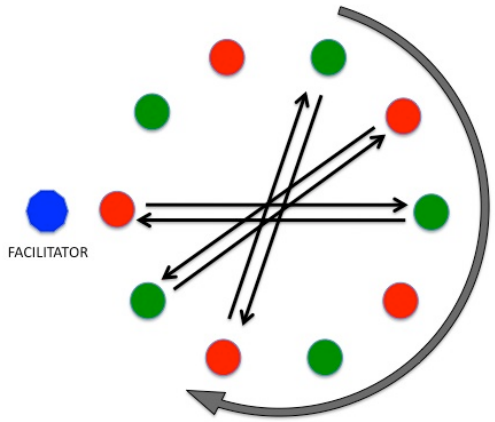

Figure 3: Circular questioning

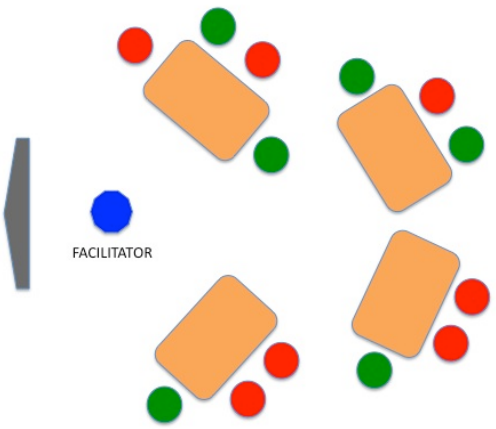

Figure 4: Horseshoe groups

Practicalities

When organising a small group teaching session, it can be helpful to consider Maslow's Hierarchy of Needs (Maslow 1943). In practical terms, an individual student will not achieve their learning potential (higher order needs) if their physical and social environment (lower order needs) is not optimal.

Task

Think about some of the practicalities of small group teaching.

- How would you arrange the chairs and tables for the different styles or examples of teaching?
- How might the chosen set (layout) influence the interaction of participants with the material, intended learning and each other?
- How might you use audio-visual aids in each context?

Physical environment: The temperature, lighting and room size are often difficult to control but position of furniture can and should be altered to suit your needs. The position of learners relative to the facilitator and each other will also affect the group dynamic.

Time limitations: It is important to determine how long a session should last for and share that information with your learners at the beginning of the session. Individuals may have limited time available due to clinical commitments and this will alter the group dynamic, especially if they turn up late or have to leave early. Learners are able to concentrate to varying lengths of time and for example after lunch, group attention may wander. When designing the session, these factors should be borne in mind and adjusted accordingly; ideally in consultation with the learner group.

Group composition: Knowing your audience is imperative and whether the learners know each other socially, academically or clinically will also change how a session plays out. Varying knowledge levels will also alter a group's dynamic and how comfortable individuals feel to participate. If the session is pitched correctly it will engage all the learners rather than confusing some or boring others.

Task

You are tasked with planning a teaching session. You must prepare a 30 min workshop in your anaesthetic department for eight 4th year medical students on 'basic airway management'.

- Think about your learners. How might you decide what *they* would find useful from this session?
- What does your seminar room/coffee room look like? What are the constraints of this space?
- How might you use audio-visual aids?
- What extra equipment would you like and why?

Planning

There are several steps that can be helpful to consider, when preparing a small group teaching session (London Deanery 2011). We will use the example above to illustrate these key steps:

1. **Consider group characteristics:** Our medical students are all at the same level, may know each other and will probably have had limited clinical exposure. However, these are all assumptions and it is important to clarify the knowledge and experience of your learners, because, for example, one student may have been an anaesthetic nurse before becoming a medical student.

   Introductions will be useful as an 'icebreaker' at the start of the session even if the learners know each other. Your introduction and background will add credibility to your role as facilitator.

2. **Constraints of your environment:** To some extent you are guided by the structure of the space you have available to you. Access and assess your room before your session to identify the facilities, available furniture and work out how best to use your space.

   Don't be afraid to change the room layout to suit your needs: move the chairs and tables around or fold them away completely. Work out what audio-visual aids you

might use if any and what extra equipment you might have to bring with you. Lighting is also key, and if you are lucky enough to have some natural light – use it.

3. Content: You may already have an idea about what you want to teach this group of medical students; however identifying their 'learning needs' is more difficult. Asking them what they would like to get out of the session is a good first step and may also serve to engender a relaxed and open atmosphere.

Contact your learners by 'group e-mail' inviting them to set the learning outcomes themselves. If they are not forthcoming, you may need to offer them suggestions but well-placed questioning might just unearth some overlooked learning needs.

4. Time frame: Awareness of how much time is available and how long the planned session will actually take is important to ensure each part of your session is completed.

Rushing through the second half of a session in the last five minutes is not ideal, so plan and practice your tutorial. Allow time for interaction and questions both during and at the end of the session.

5. Identify the AIM: Use this subheading to offer an overview of what might be learnt and describe why the session is important. Signposting the aim of the session to the learners, ideally prior to the session, will help you to structure your teaching and help them to understand what they are going to learn. An example:

Management of the airway is a cornerstone of resuscitation and implementing simple airway manoeuvres is often all that is required to improve ventilation and oxygenation. During this session we will look at basic airway equipment and introduce the practicalities of basic airway management.

6. Learning outcomes: will more specifically define the goals of the session and will offer structure to the teaching. An example:

By the end of this session you will:

- *Understand the importance of correctly managing the airway*
- *Have a working knowledge of the clinically relevant anatomy*
- *Be familiar with the equipment used in airway management*
- *Be able to size and place relevant basic airway equipment*
- *Be able to support the airway using basic airway equipment*

7. The learning: A decision must be made about how the content of your session will be delivered, how practical a session it will be and how much theory you will discuss. Remember the learners may have already been taught some of the relevant anatomy and physiology in lectures and finding out how much they already know can help to engage them in a dialogue and avoid repetition.

8. Question style: This style of teaching lends itself to participation and active

discussion and is preferable to a lecture-style monologue. Your first questions for the learners can be crucial to success and will often establish the tone for the rest of a session. Asking a broad, enquiring, open-ended question will motivate the group and invite interaction. Closed questioning can command the group's attention, but care must be taken not to promote anxiety and stress. The wrong type or style of questioning may close down discussion and prevent enquiry for fear of ridicule.

Enquire if any of the learners have seen an obstructed airway or had experience with managing an airway. Individuals often feel more at ease talking about their experiences because there are no wrong answers.

9. **Key elements:** Interaction is key to this style of teaching and using different techniques to engage the learners will make the session relevant and interesting whilst maintaining focus and concentration. With a bit of luck, the group may even retain some of the information shared during the session. Below is by no means an exhaustive list, but are some of the ways to engage the learner:

    - *Tasks and activities – using flip-chart paper and coloured pens, split the learners into smaller groups and ask them to draw diagrams or make lists, which can then be presented to the group. This type of activity is interactive, identifies and pools existing knowledge and reduces the confrontational element of asking specific knowledge-based questions.*
    - *Audiovisual – with care, technology can enhance learning. Showing a short video clip or using recorded sounds can offer relevance and stimulate discussion.*
    - *Clinical scenarios – relating the material back to what the learners might see clinically will make the session relevant and offer context.*
    - *Mannequins and equipment – getting the learners comfortable with equipment and practicing, will reinforce new and existing knowledge.*
    - *Problem-based learning – self-directed learning can help to identify the learner's needs. Set a 'problem' and then ask the group to research and investigate the possible 'solutions'. (NB. If you do not want the learners to leave the room, appropriate resource material must be made available).*

10. **Close:** A teaching session needs to be ended appropriately. It is important to answer any final, relevant questions and then summarise the key learning points. A 'take home message' can often help to tie a session together and it is worth directing the learners to further resources, to enable them to continue to solidify their understanding of the subject matter covered.

11. **Feedback:** It is important to offer some element of feedback to your learners during the session. Most of this will be formative (*for* learning) but there is sometimes a need for summative feedback (*of* learning), where the learners need to reach an approved standard. Constructive critique can be a very valuable process but if a certain level or grade is required, this should be made explicit at the start of a session.

12. **Evaluation:** The learners should help to evaluate the teaching episode to highlight areas for improvement. This is commonly accomplished using an anonymous feedback form distributed at the end of the session. There is obviously a balance to be had between having a form that is easy to complete and obtaining enough useful information to change elements of the session. The compromise is usually to limit the evaluation sheet to one-side of an A4 page and have a combination of closed questions, which are scored and open-ended questions with space for free text.

13. **Reflection:** It is worth reflecting (as soon after the teaching episode as possible) on elements of the session that worked well or areas that could be improved. Writing down events and key reflections can help to solidify your ideas. If you can, employ the services of an observer. Structured feedback on your teaching methods and style and your interaction with the learners can offer invaluable insight.

Reflection

Have you ever been part of a teaching session where there was a disruptive individual in the group? It may even have been you! Think about why he or she acted in this way. What techniques could or did the facilitator use to bring the session back on track.

Dealing with difficult personalities

A group of learners will have a range of different personalities and learning styles and this will affect the dynamic. Awareness of these factors will help to understand why some individuals naturally engage more than others with different types of teaching styles. Sometimes a particular personality can be detrimental, either to that individual's learning or worse, to the learning experience for other members of the group. Negative attitudes can be the most destructive and the art of good facilitation is knowing how to balance these personality types and allow the group to function without making the individuals concerned feel isolated or picked upon.

Setting 'ground rules' for the group from the outset can often help to define acceptable behaviours within the group, and then be used to prevent or quash clashes between students quickly. Ground rules are best set by the learners themselves, and examples might include: arriving on time, maintaining confidentiality within the group, not interrupting, respecting others opinions even though you may not agree with them.

Key thoughts

With respect to how you deliver your educational aim and learning outcomes, the fascinating thing about small group teaching is that the world is your oyster and you are only limited by your imagination. Play around with the format, try out new ideas and really think about how best to present your material to deliver an engaging and interactive encounter. If you get it right, the rewards will far outweigh the time and effort taken to organise the session.

Evidence of progression

Basic level

- Constructively critique the next small group teaching session you attend under the following headings:

1. Was it *teacher* or *learner* centred and who did most of the talking?
2. How did the learners interact with the facilitator and each other?
3. Which elements worked well and what could have been improved?
4. How might you have run the session differently?

Intermediate level

- Prepare and deliver a small group teaching session and ask the learners for written feedback on your teaching. Write a 200 word reflective piece on the feedback you received. How might the feedback and your reflections change how you would deliver the same teaching session in the future?

Higher level

- Ask an observer to watch and then critique a small group teaching session that you facilitate. Ask them for written feedback. Write a 300 word reflective piece on how you think the small group teaching went and on the written feedback you received. In the last paragraph state three things you will try out that might improve the session for next time.

Further reading

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RCoA 2010 Syllabus Key

TM_IS_01 Participates actively in departmental education and learning and records their participation in their reflective portfolio.

TM_IS_03 Plans and conducts a teaching session e.g. lectures, workshop, tutorial, and seeks written feedback on their performance from participants.

TM_HK_05 Understands the educational principles underlying the preparation of effective lessons and presentations.

TM_HS_05 Demonstrates effective lecture, presentation, small group and bed-side teaching sessions.

TM_HS_11 Is able to lead departmental teaching programmes including journal clubs.

TM_HS_17 Assesses the quality of teaching both classroom and workplace-based and records this in their reflective portfolio.

Aims

We all remember from medical school the good and not so good lectures. Some lecturers captivated, informed and amused with seeming ease and style. For most, delivering a lecture often provokes anxiety and apprehension. However, by following a few simple rules, you can deliver a structured, informative teaching episode, which may even include some audience participation.

The purpose of this chapter is to increase your understanding of the use of lecturing and build confidence in preparation and presentation skills when faced with teaching large audiences.

Intended learning outcomes

At the end of this chapter, you should be able to:

1. Define the role and benefit of a lecture, and appreciate the limitations (TM_HK_05).

2. Understand the underlying educational principles of preparing and delivering an effective lecture style presentation (TM_HK_05).

3. Plan and deliver an effective lecture using multi-media equipment (TM_IS_03, TM_BS_06, TM_HS_06).

4. Obtain and reflect on constructive feedback (TM_BS_07).

Activity

Basic – Consider the strengths and challenges of delivering a lecture? What specifically concerns you most about delivering a lecture? How might you overcome these issues?

Intermediate – Think of an example of a really good lecture you attended and one that didn't seem to work as well. Compare and contrast the speakers, but also think about the role the learners played. Did the subject matter have any bearing on the outcome of the presentation, and if so, why?

Higher - Write a 200 word reflection on a lecture you have previously given. How might you improve it for next time? How might you engage the audience more? How could you maintain or re-establish concentration levels during a lecture? Are there any ways you could consider integrating technology further into your presentation?

History

The noun 'lecture' dates from the 14th century latin '*lectus*' and its accompanying verb '*legere*' means 'action of reading that which is read' (Harper 2012).

No single *learning* style suits every individual, in the same way as no *teaching* method benefits every learner. One criticism of lecturing is that it only offers one-way communication, from teacher to learner and that it does not encourage audience participation. However, lectures are an effective and efficient method of introducing new subject matter to large numbers of students and delivered by a talented and enthusiastic speaker can be highly engaging and stimulate further enquiry.

Characteristics of a successful lecturer

- Knows the target audience and their existing level of knowledge
- Shows authority, knowledge and enthusiasm for the subject
- Includes material not readily accessible in textbooks
- Presents the material in a clear, concise and logical sequence
- Makes the material accessible, intelligible and meaningful
- Illustrates the practical applications of the theory presented
- Generates curiosity about the lecture material

Benefits of a lecture

With the advent of virtual learning environments (VLE), teleconferencing and podcasts, information is readily available at the touch of a screen. However, prior to this technology, the only effective way to disseminate up to date, verbal information to a large number of people, was through lectures. When successfully delivered, a presentation can provide; background concepts, current opinion and new ideas, all of which can be developed further by the learners during private study or in small group discussions.

A successful lecture:

- Is relevant, well presented and holds the audience's attention
- Is logical, stimulating and inspiring
- Supports and builds on previous learning
- Facilitates learning of key principles
- Fits appropriately into the overall teaching programme

(Bligh 1998)

Disadvantages of a Lecture

- Tendency for audience to be passive, for example, busy taking notes but little time to reflect, question or analyse ideas
- Not effective method for inspiring changing attitudes or promoting critical appraisal
- Not suitable for a wide range of abilities
- Does not encourage the audience to move beyond memorising information presented
- Long-term retention of information may be poor

(Bligh 1998)

Task

Access a short "lecture" of your choice from TED at www.ted.com/talks. Under the following sub-headings, critique the lecture:

- Set - how is the room/stage/seating set out
- Dialogue - how does the lecturer get his/her message across
- Closure - how is the message/learning confirmed with the audience at the end of the presentation

Planning a lecture

Abraham Lincoln, 16th President of the United States, reportedly once said:

'If I had sixty minutes to cut down a tree, I would spend forty minutes sharpening the axe and twenty minutes cutting it down.'

A lecture is probably the one occasion when you as the educator will have the luxury of ample time - use it well. Peyton and colleagues (Harris 1998) have described a method for planning a teaching event based around a triad of concepts:

- **Set**: what you need to think about beforehand
- **Dialogue**: what happens during the event
- **Closure**: how you finish off

We will use these sub-headings to illustrate how to effectively plan a lecture.

Set

Prior Preparation Prevents Poor Performance (Defence 2012).

- **Environment:** Make sure your audience can hear you and see your visual aids, and optimise the heating and lighting to ensure an alert, visible audience. Although this may well be inflexible, make sure the room layout is appropriate, for example, with the chairs arranged in an informal or formal seating style and offering the ability to take notes.

- **Aim:** Be explicit about what you require the participants to take away from your session, for example, increased knowledge, a better understanding of current controversies, or possibly even the realisation that there is a lot to learn for an exam.

- **Learning Outcomes:** Outline your expectations of the audience, for example the level of interaction. Set clear, specific learning outcomes, which are achievable in the allotted time. Pitch the information at the correct level for the audience and make it relevant to current level and clinical practice. This will help to maintain interest.

Dialogue

Tell the audience what you are going to tell them, tell them it, and then ask them something that shows you they understand (Stanford 2012).

- **Content:** This is usually prescribed by a syllabus, curriculum or guideline. The key is not to overload the audience with too much new information but take time to ensure principles and concepts are understood and use illustrations, analogies and explanations to encourage understanding and recall.

- **Delivery:** Introduce yourself and provide a short biography (not an entire CV) will provide context and credibility to those you are “lecturing” and will help them to engage with you as a credible source.

  Engage your audience with well-placed humour (if you are good at it) and tailored

anecdotes or stories. Varying your teaching method if the session lasts longer than 20 minutes will increase learner recall, as this is the average attention span for adult learners.

The importance of eye contact and body language should not be under estimated and pace your delivery. It can be useful to pause purposefully every 20-30 minutes to allow the audience to: take notes, consolidate information and ask clarifying questions.

- **Encourage Active Learning:** There is a misconception that lectures cannot be interactive. However, in truth the relationship between the teacher and learner is crucial. Value the audience, monitor reactions and seek contributions because they are an integral part of your lecture.

  Promote participation with role-play, quizzes and data interpretation, or break up longer sessions by asking the audience to work in small groups for short periods. Look at 'The Flipped Classroom' for a fresh take on the traditional model (Kachka 2012).

- **Handouts:** The use of handouts is a personal preference. Determine in advance when to give them out, if you choose to use them. This decision will help you to tailor your handouts for optimum benefit. Examples include:

  - A 'PowerPoint handout' of your slides (3 or 6 slides per page)
  - Partially completed lists and diagrams to complete during or after lecture
  - Summary notes with main take-home messages highlighted
  - Key references or a useful journal paper for further reading

- **Questions:** Encourage interaction and check understanding by asking well-placed questions. Invite a response from the whole audience or direct a more specific question to an individual. Answers should be received with positive signals to the whole audience. Positive verbal and non-verbal cues will encourage further participation and a sense of *safety*.

  Care must be taken not to demoralise the group with questions that are too difficult or obtuse, or by leaving an individual 'stranded', unable to respond. Techniques for reframing questions or diverting attention to another candidate should be practiced. Allow the learner time to think about and frame an answer (Sometimes it is useful to count to ten in your head – silence is golden).

- **Keep to time:** Know how long you have and how long your material will last. Leave enough time for questions both during and towards the end of the session.

Closure

How the session is terminated.
(It is important to get the sequence of the *close* right for the most impact).

- **Questions:** Allow time for questions, but offer to discuss any in depth issues after the presentation (perhaps in a coffee break).

- **Summary**: The key material covered should be summarised at the very end. Leave the audience with three take home messages. Do not take any more public questions. An obscure question has the potential to detract from the salient learning points.

- **Further reading:** Direct learners to links and reference material that compliments the topics covered during the lecture.

Your 'Dialogue'

Making it accessible

Thought should be given to 3 key areas:

1. Presenting of information

- Classical – lecture is divided into sections and sub-sections, facilitated by Powerpoint™ headings that have become a standard
- Problem-centred – focused on a particular topic and working around many aspects of a clinical case for example
- Sequential – explaining how the present situation/thinking/process developed by using a historical timeline approach

2. Explanation

- Descriptive - what?
- Interpretive - how?
- Reason giving - why?

3. Structure

- Signposting **-** we are going to cover A, then B and finally end up with a summary of A + B
- Foci - statements highlighting key points
- Links - make explicit links between one topic and the next. This helps your audience to process and understand the material

Task

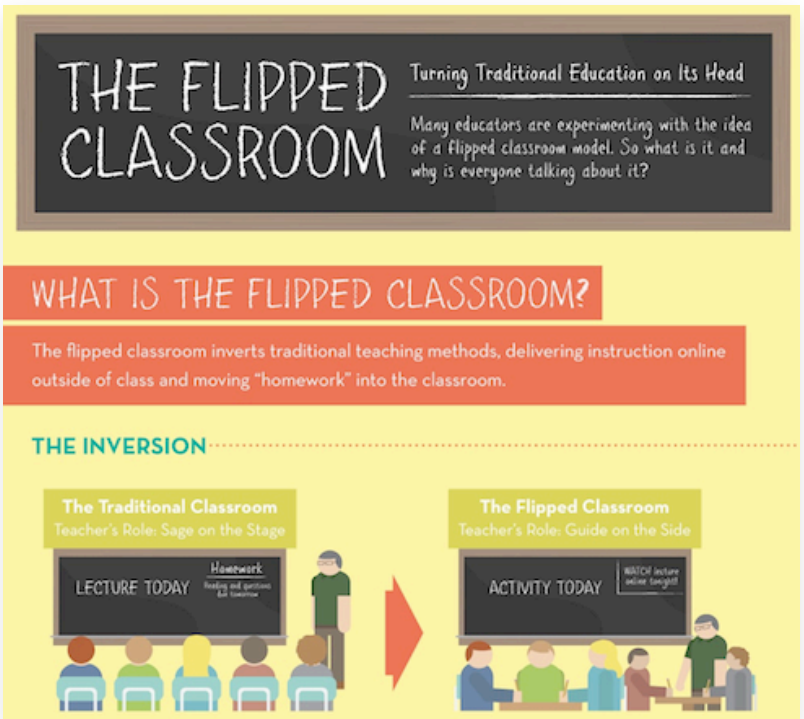
Try '*Flipping the classroom*'

- Lecture is done for homework - usually via a video or audio file
- Classroom time is spent clarifying & applying new knowledge gained

Eric Mazur, a physicist at Harvard, has been using the method for 21 years. He calls it 'peer instruction' (Mazur 1997). With the addition of assistive technology, this process works to maximize time with the instructor and focus on higher order thinking skills rather than just taking notes and regurgitating facts.

Watch Mazur's video: http://www.youtube.com/watch?v=hbBz9J-xVxE, then review the Faculty Focus articles (Kachka 2012).

- Now put this concept into practice for a lecture you give regularly



Evaluation

After a lecture, it is important to investigate whether teaching has been transformed into learning and if learning outcomes have been achieved. Although often inextricably linked and equally informative, care must be taken to distinguish between evaluation of the teacher and assessment of the learner.

A. Learning: Assessment of the learner can undoubtedly offer information about the education they have received. Observing students *using* their new knowledge and understanding, in complementary small group discussions or during practical sessions, will offer a wealth of information but is often impractical to implement.

Most resort to more immediate techniques designed to assess recall, understanding, or application. For example, it has become popular to offer multiple-choice questions (MCQs) at the end of a session intended for Continued Professional Development (CPD). The mark attained is then offered as 'proof of learning', replacing the much loved 'certificate of attendance' which really only served as proof of *attendance*. However, with so many other factors affecting an individual's *learning*, assessment of the learner using answers from a *test*, may not elicit the truly useful information of when, why and how learning occurred.

Reflection

Think about a lecture that you attended where the subject matter was difficult to digest. What did you think of the teaching? How did you eventually learn the material? Now think about an *entertaining* lecture you attended. How did you evaluate this lecture?

Reflect on how each session promoted your learning.

B. Teaching: Evaluating the *teaching* often involves some form of questionnaire at the end of the session, however, these invariably focus more on critiquing the lecturer as a *performer*, rather than on finding out about the learning experience. A lecture may be very entertaining, and elegantly delivered, which students favour, but this does not necessarily promote learning (Economist 2012).

The composition of a questionnaire is a compromise between making it straightforward enough to complete, so that the learner will fill in at the end of a lecture, whilst still obtaining enough information for effective evaluation.

Limit the length of a questionnaire to one side of A4 and try to make the questions unambiguous. For easy of use, offer some sections that rapidly grade particular aspects of the lecture, but also ask more open questions to encourage free-text comments.

Anonymising answer-sheets or questionnaires will *protect* the learners from feeling individually scrutinised but should still offer information about whether the session promoted learning.

Reflection

Personal thoughts: As soon after the session as possible, take time to critically reflect on what you thought went well and what could be improved for next time. It can be useful to write down your thoughts; these notes can be added to your education portfolio.

Peer observation: Ask a colleague to observe your teaching and provide feedback but try to be specific about what you are asking them to focus on. Sit down together after the session and have a reflective conversation about your teaching and how you interacted with the learners (Dahlgren 2006).

Video: With the consent of the learners, record yourself giving a lecture. This can then be viewed privately or with a colleague. Watching yourself on video can be a very uncomfortable, but also enlightening experience, be critical about your teaching skills, but try not to be *too* hard on yourself.

Key thoughts

Lectures are still a common teaching method in both undergraduate and postgraduate medical education. Popularity continues because a lecture provides an effective and efficient means of teaching essential information and concepts. However, a lecturer should not be too frightened to play around with the 'standard' format. Periodically splitting up larger groups and using some of the methods described in the chapter on small group teaching will help to promote interaction and ensure learning.

Evidence of progression

Basic level

- Plan a 45 minute lecture using the structure of: set, dialogue and closure, suggested above. This presentation could be for a departmental teaching session or an external event.

Intermediate level

- Design and use an evaluation questionnaire for a lecture. Collate and reflect on the feedback you receive from your students.

Higher level

- Ask a colleague to observe a lecture you deliver. Then have a feedback session where you both critique your teaching skills. Now write a 300 word reflective piece on what you have learnt from this conversation.

Further reading

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RCoA 2010 Syllabus Key

TM_BS_06 Delivers a lecture or audio-visual presentation using appropriate multimedia devices & techniques.

TM_BS_07 Obtains feedback on presentations and tutorials they have delivered [in written format].

TM_IS_03 Plans and conducts a teaching session e.g. lectures workshop, tutorial, and seeks written feedback on their performance from participants.

TM_HK_05 Understands the educational principles underlying the preparation of effective lessons and presentations.

TM_HS_05 Demonstrates effective lecture, presentation, small group and bedside teaching sessions.

TM_HS_06 Makes appropriate use of teaching aids and visuals to enhance formal teaching.

TM_HS_11 Is able to lead departmental teaching programmes, including journal clubs.

Aims

In this chapter we will explore education in the clinical workplace from both the perspective of the learner and also the teacher. Firstly identifying the needs of the learner, then helping the learner to fulfil those needs and lastly checking that the needs were met in the educational encounter.

Intended learning outcomes

By the end of this chapter you should have a better understanding of how to:

1. Identify and implement opportunistic teaching (TM_HS_07).
2. Provide appropriate supervision to more junior anaesthetists (TM_HS_10).
3. Effectively teach a practical skill (TM_IK_03).
4. Plan and execute a 'teaching' list (TM_HK_03).
5. Reflect on constructive feedback received regarding your own teaching (TM_BS_11).

Activity

With a little planning a routine list can be educationally productive. As a starting point it is useful to have identified the learning/teaching opportunities available. Consider this typical half-day trauma list submitted by an orthopaedic ST1:

1. Edward Davis	**23/03/86**	**ORIF Ankle (120mins)**	**Ward 49**
2. Donald Thomas	**05/08/04**	**MUA +/- K-Wires (90mins)**	**Ward 55**
3. Greta Howards	**16/12/23**	**DHS (60mins)**	**Ward 36**
		(Anaesthetist review please re: IHD, AF, CRF)	
4. Nilam Bah	**21/01/63**	**Removal of plate (30mins)**	**Ward 55**

Basic – Write down a list of the potential learning opportunities on this list. Try to give at least three possibilities per patient.

Intermediate – Write down the potential teaching opportunities within this list. Again try to give at least three potentials per patient.

Higher – Now consider how you might marry these learning and teaching opportunities together and how you might practically structure the morning to achieve some valuable learning.

Overview

Learning opportunities can be broken down into the domains of **knowledge**, **skills** and **attitudes/behaviours**. Knowledge and skills usually predominate, for example: discussing extremes of age, anaesthesia for day case surgery, co-morbidities, and performing neuraxial or regional nerve blocks.

However, other aspects such as: the order of the list, time management, negotiating with other team members, etc. are examples of 'non-technical skills' or attitudes and behaviours that are equally important to be learnt, developed and indeed assessed. The clinical workplace is an ideal environment for teaching professional behaviours and identifying good leadership and team working qualities. In Good Medical Practice, when discussing '*Good Doctors*' the GMC states:

> *'Teaching, training, appraising and assessing doctors and students are important for the care of patients now and in the future. You should be willing to contribute to these activities.'*
>
> (GMC 2006)

The expectation is that all doctors should pass on their skills and knowledge to help educate other doctors. In the long term, this means developing and preparing the future generations of consultants to be expert practitioners. In the short term, it means appropriately supervising more junior colleagues, and being honest when appraising or assessing the performance of others.

To achieve learning, we must **identify** the learner's needs, **fulfil** those needs, and then **check** that these learning needs have been met.

Identifying learner's needs

Unlike other medical specialists, anaesthetists often have the luxury of one-to-one teaching. While this is not an efficient way of teaching a cohort, it allows teaching to be tailored to the individual learner. A learner's *needs* will depend on their previous experience and knowledge base. This will help to pitch the teaching at the right level. Often anaesthetists in theatre will have 'pet' topics they like to discuss. Unfortunately, this may lead to a performance (or teaching session) without any audience participation (or learning).

Remember the teacher puts the ideas in the air, but they don't do the work that results in learning. The learner does this in his or her own head. A useful way to assess a learner's needs is to ask *them* what they would like to 'learn' that day. However this question can be met with a shrug of the shoulders and an, '*I don't know*'. It does not necessarily mean the learner lacks interest, they may not be used to the question actually being asked. A more useful and less generic question might include: '*Have you got a Workplace Based Assessment to complete?*' or '*Is there a particular topic you would like to discuss?*'

If you know in advance that you will be working with a particular colleague, *you could ask them to suggest some topics* and both do some preparation. There is more to teaching than *'Do you want to do the arterial line or central line?'* or serial coffee breaks. The aim of this question is to find out what the trainee feels they need to learn. Motivations will vary: there may be an exam just around the corner or a clinical question arising from a previous clinical encounter.

Being specific about learning needs can be difficult, but given a topic selected arbitrarily, it may be helpful to discuss:

- What the trainee currently can and can't do and any previously unsuccessful attempts.
- Prior feedback received.
- What additional knowledge and skills the trainee might need to complete the case independently.

Constructive phrases might include:

- *'If this was your own list (case/ward-round/clinic), what would hinder you from doing it independently?'*
- *'Which elements would you need advice/help to complete?'*
- *'How far away do you want me to be during the case?'*

These and similar questions may help the learner and teacher identify appropriate components of a case or list to concentrate on; the knowledge gaps that merit discussion or the skills in need of practice.

Fulfilling the learner's needs

Anaesthesia is a **practical** specialty and learning often accompanies our exposure to clinical situations. No other setting provides the same rich opportunities for close behavioural observation of statements, opinions, interactions and reactions under pressure. It is difficult for a teacher to hide their responses and equally the learner cannot easily hide their own knowledge, skills and attitudes to a given clinical situation (Cantillon and Wood 2010).

As learners (and anaesthetists) we want to get our hands dirty and practice a procedure. Indeed this is a vital step in the process of mastering a new skill, but an important first step is also to observe someone else performing the skill.

As adult learners, we can learn from our experiences (experiential learning) especially if we utilise our prior knowledge, think about our previous experiences, and then reflect on how we may have done better. We naturally reflect most when something goes wrong, but practising self-reflection regularly will help identify what might be improved for next time.
There are 4 stages of the experiential learning cycle (Kolb 1984). See Figure 1:

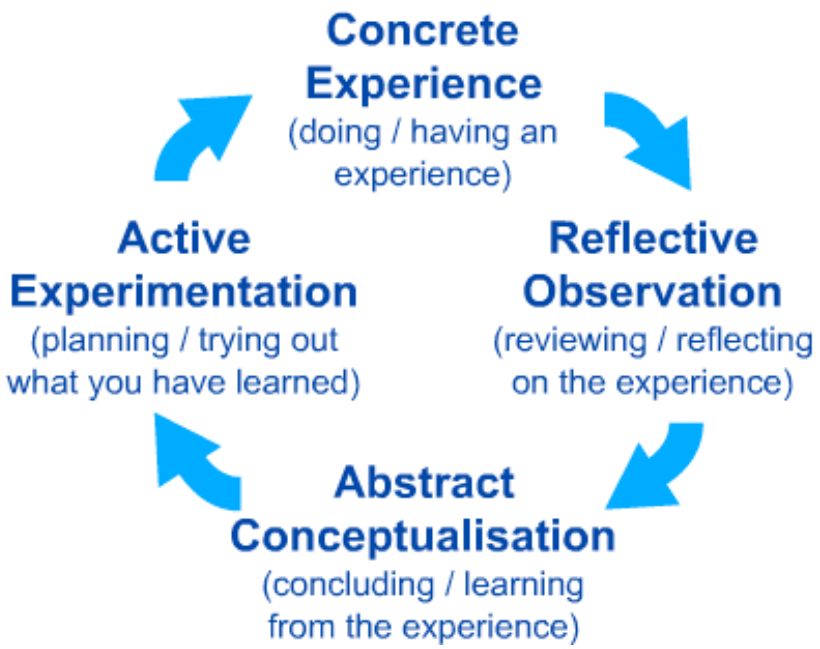

Figure 1. Kolbs experiential learning cycle.

Apprenticeship model

An apprentice is someone who is paid by his or her employer to learn. Clinical anaesthesia can be thought of as an apprenticeship. Collins *et al (1991)* describe six stages that a teacher might use to assist their apprentice in mastering a task.

1. Modelling: allow the learner to observe your practice in order to build up a conceptualisation of that practice.
2. Coaching: watch the learner practice, offering them guidance, critique and feedback.
3. Scaffolding: offer the learner more opportunities to practice, gradually and purposefully increasing the complexity of the work undertaken, while slowly fading your input.
4. Articulation: use questioning and supervision time to encourage the learner to talk through what they are doing, why and how, and also provide a rationale for the approaches they have used.
5. Reflection: encourage the learner to analyse his or her own performance and compare it with that of an expert, to identify ways to further enhance his or her own performance.
6. Exploration: provide opportunities for the learner to undertake new tasks and activities, thus prompting independent thinking and actions.

Teaching and learning styles

Knowing that there are different learning styles and different ways of teaching can help in a learning encounter. Altering your teaching style to fit the topic, the situation and the trainee's own learning style can help improve the end result – a valuable learning experience for all. To achieve this, you must ascertain the learner's knowledge, experience and current stage of learning.

Task

Pick a recent one-on-one learning encounter that you were part of (either as learner or teacher) ; consider what teaching style was used. List 5 words to describe this style.

- Did this match the learning style of the trainee?
- What kind of learner are you?
- What kind of teacher are you?

While we might assume adult learners to be self-directed, this skill takes time to develop. By **facilitating** learning, rather than spoon-feeding or leaving the learner to it, we can nurture this aspect of learning. Grow's 'Stages of Self-Directed Learning' (SSDL) model (Grow 1991) proposes 4 developmental stages for the student (see Table 1).

	Student	Teacher	Examples
Stage 1	Dependent	Authority, Coach	Coaching with immediate feedback. Drill. Informational lecture. Overcoming deficiencies and resistance.
Stage 2	Interested	Motivator, guide	Inspiring lecture plus guided discussion. Goal setting and learning strategies.
Stage 3	Involved	Facilitator	Discussion facilitated by teacher who participates as equal. Seminar. Group projects.
Stage 4	Self-directed	Consultant, delegator	Internship, dissertation, individual work or self-directed study-group.

Table 1. Gearld Grow's 'Stages of Self-Directed Learning' (SSDL) model

A good teacher recognises the stage the learner is at, and adapts their teaching style to suit these needs. For example, in relation to Grow's SSDL if there is a T1/S4 mismatch, the learner will feel patronised, bored and even rebellious. Equally if there is a T4/S1 mismatch, the learner will require more organisation and guidance to aid their learning, and may feel lost without this structure. By helping the learner to reflect on their own practice, you can help them to identify their individual learning needs, and then suggest ways they might meet these needs.

Challenges and practicalities of learning in the workplace

In clinical teaching, not only do we need to consider the learner's needs, but also the needs of the patient, and the service we are providing. Whether this relates to time management in theatre, a busy ICU on-call shift or patient safety under anaesthesia, the teacher (and learner) must bear these issues in mind.

Task

Use 5 words to describe your experiences of being taught in theatre.

Now perform a SWOT analysis (Dosher *et al.* 1960) on this one-on-one style of teaching, i.e. what are the:

- Strengths
- Weaknesses
- Opportunities
- Threats and Barriers

One-on-one teaching in theatre is one of the unique qualities of our specialty. It can be beneficial for both trainee and consultant, not just because it affords serial coffee breaks! Trainees see how to perform their chosen field first hand from an expert, and consultants receive a fresh perspective or learn about how others conduct similar cases. There are always going to be *barriers* to teaching in theatre but the following are some ways to limit or circumvent some of the more common pitfalls.

Patient safety

Patient safety is core to all aspects of anaesthesia. However, with prior discussion teaching should not hamper this core position. Roles should be made clear from the outset. Identification of who will be monitoring the patient during the teaching episode is valuable.

A classic example to highlight its importance is the patient who becomes hypotensive during a procedure but both anaesthetists have internally delegated the responsibility of monitoring the patient to each other and it is the anaesthetic assistant who brings this to the team's attention.

Reflection

Spend a moment thinking about how this situation could be avoided. How would you *practically* prevent this from happening?

Below is an example of how one might set the tone for a teaching list:

> *'I am going to let you manage the case and make the decisions. Don't necessarily look to me for confirmation for decisions you make, but I am here if you need me. I will step in if I think there is a patient safety issue'.*

Time pressures on workload

Teaching takes time and an inexperienced trainee may take longer to complete a task. A compromise might be to allow them to do part of the task. Knowledge of the list load, surgeon and theatre staff will help identify where changes can be made to allow for training time, e.g. sending for the spinal patient twenty minutes earlier than usual. Contacting each other before a list to discuss the possible learning opportunities will save time on the day, and allow prior planning on both sides. Sometimes a trainee can *help* with list efficiency by sharing tasks!

Task

Plan a clinical teaching session for an elective list you have coming up. Identify:

- Learning opportunities.
- Learner's needs.
- Decide on the content and how it will be covered.
- Set aside time for constructive feedback.

Unplanned teaching sessions

Providing effective teaching in the workplace can seem difficult during a busy on-call when the patients' needs must come first. However, there are valuable learning opportunities during out-of-hours work. Unpredictable clinical situations require the teacher to be flexible, in contrast to a pre-planned well-rehearsed lecture. Knowledge of the specialty, and previous teaching experience can be drawn on in unplanned circumstances.

Lake and Ryan (2004) suggest:

> *'Given that we know we will be teaching, we know we are going to be busy and we know the topics that recur, we* ***can*** *plan.'*

Many clinicians have a set of teaching scripts, based on recurring clinical situations. These can be adapted to new teaching moments, and will be incorporated into your set.
In ICU, to some degree the subject matter is determined by the patients on the unit at any given time, but the learning opportunities are endless. Think about how you might include a more junior colleague during a busy ICU ward round.

Reflection

Think about what common clinical situations occur whilst on-call. How might you utilise these as learning opportunities?

Opportunistic teaching

By definition, opportunistic teaching is unpredictable, however learning can be maximised. A common misconception is that opportunistic teaching prohibits pre-planning, setting learning outcomes, and offering time for reflection. Without suitable preparation there is a danger that clinicians will only teach their favourite subjects. Planning for opportunistic teaching can include: knowledge of the curriculum, knowledge of the learner(s) and then targeting teaching to mutually set educational goals.

Educational strategies for optimising opportunistic teaching are designed to be incorporated into daily work. A common theme is that many of these strategies are about making the **implicit knowledge** of the teacher more **explicit** to the learner - sometimes the most experienced clinicians find this reflection on their own competence a real challenge and struggle to make their expertise accessible to others.

Task

What are the pros and cons of these learning strategies?

- **Shadowing** (follow me round and see what I do).
- **Reporting-back** (go and see the patient and tell me what you find).
- **Ward-round teaching** (discussion of the patient at the bedside).

Strategies

Demonstrations – The learner can observe and critique a skill performed by the teacher. The learner can summarise what they saw, and then discussion can draw out learning points. Constructive feedback will help a learner to appreciate what they observed and improve their observation skills for the next encounter.

Thinking aloud – Having an 'expert' explaining **why** they chose to do certain things in a specific way is a valuable technique which helps a learners understand the indications or implications of a decision or action.

Observation with feedback – trainees want constructive feedback. Really concentrating on the way a learner performs a task and then discussing the process can build confidence, be corrective, and aid development.

Bite-size chunks – long lectures can exhaust learners, but a few minutes on a contextually relevant clinical topic is highly beneficial and will cement what they have learnt from the clinical encounter.

Role modelling – teaching should also include topics such as professionalism, team working, attitudes and behaviours. Although equally as important, learning should not always be confined to knowledge and skills.

‘Experience’ and ‘explanation’ cycles

Cox (1993) described two linked cycles to maximise learning from patient contact. The first is the **‘experience cycle’** – the learner is briefed on what they might see, and what the potential learning opportunities will be. The clinical interaction occurs, and then there is a debriefing of what happened, the **‘explanation cycle’**. Teacher and learner now discuss the clinical encounter, what the problems were and how they were dealt with. The learner can then reflect on what they saw and learnt, building on their previous knowledge and experience: the **pre-brief** and **debrief.** Cox’s cycles could be used when a learning opportunity arises on-call. The learner can be briefed on the way to pre-assess a patient, signposting what relevant questions they might ask, or what is particularly important in the case.

Teaching and learning clinical skills

Fitts and Posner (1967) described a three phase model of motor skill acquisition:

- Cognitive phase – the skill is being learned.
- Integrative phase – the performance becomes skilled.
- Autonomous phase – the skill becomes automatic.

You can use the example of learning to drive a car as a simple analogy to explain this concept. With more practice and experience, learners move from novice to expert. This requires deliberate practice, coaching and repetition of the skill with constructive, timely feedback on performance.

George & Doto (2001) expand on the old adage *‘see one, do one, teach one’* in their ‘5-step method for teaching clinical skills’, which forms the basis of many trauma and resuscitation course teaching methods.

1. Overview: put the skill into context. This could be a discussion of the indications and contraindications, anatomy or necessary equipment.
2. Demonstration without comment: the learner(s) watch the skill performed in real time. This allows the learner to see how the skill should be performed, and what they are aiming for. As some skills occur infrequently, you could substitute this stage with a video.
3. Demonstration with description: the teacher explains what they are doing
4. Demonstration with student commentary: the student describes while the teacher does. This checks student understanding of the steps.
5. Student performs: opportunity for students to practice with feedback

Reflection

At what stage of your own competence with a particular skill would you feel comfortable supervising or teaching another anaesthetist?

The four stages of learning

The conscious competence model (Howell 1982) explains the process and stages of learning a new skill (or behaviour, ability, technique).

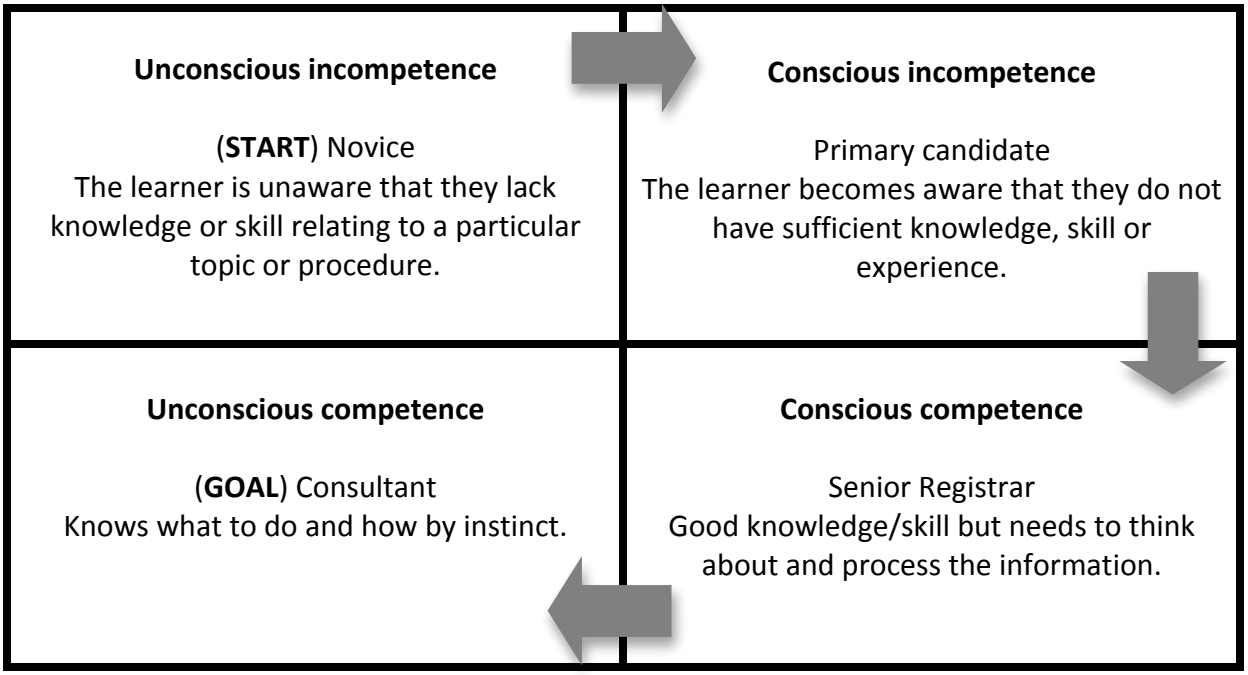

Figure 2: The conscious competence' learning model.

The matrix above explains how a learner transitions as they learn a new skill. It is indeed possible to regress through the stages if a skill is not practiced regularly e.g. anaesthetising a paediatric patient.

Inherent reasons for failure to learn a skill, such as lack of co-ordination, are rare. It is more likely that the difficulty has arisen because a learner has been taught in the wrong way, had poor supervision or poor feedback and correction. Adequate supervision and feedback is crucial in helping someone master a skill.

Even if a trainee is unable to perform the whole skill, permitting them to do a portion, and demonstrating how to do the other parts, not only involves the learner and gives them worth, but also helps to build confidence. This process aids the acquisition of additional skills until eventually the learner can perform the whole task unassisted.

Clinical supervision

You have probably been a clinical supervisor for many years even if you do not realise it. If you have not had more junior anaesthetic colleagues with you, you will have had medical students or theatre nurses or junior ODPs with you in theatre. With this role comes an extra layer of responsibility and often stress. Knowing how closely to supervise can be challenging, especially when the knowledge or skill set of the trainee is unknown. There are inherent tensions in supervising a learner. There are the needs of the patient to consider, the need for the list to run to time and also the needs of the learner. For example, a learner sometimes needs to be put outside of their comfort zone. The aim of a supervisor should be to move a learner along and around the supervision cycle.

Reflection

Can you remember an occasion when a more senior colleague, while watching you perform a procedure, put on a pair of gloves and asked to 'take over'? How did it make you feel?

How closely to supervise?

There has to be discussion beforehand between learner and teacher about when they might intervene. The most obvious grounds would be for safety reasons. However, discussion might also include agreeing how long or how many times the trainee will attempt the skill before the supervisor takes over. This should be a joint decision, as the trainee may feel anxious with repeated failed attempts without the supervisor stepping in to help.

Discussion of how to communicate in front of an awake patient is often forgotten. A useful communication 'tool' is the use of hand signals. For example the 'time out' hand signal can be used while teaching epidural insertion rather than distressing an already tense woman in labour, with verbal communication.

Has learning occurred?

One could **teach** all day, but how will you know that it has been **effective***:* that learning has occurred? The learner might demonstrate their new knowledge or skill but fundamentally the best way is to have a discussion with the learner. One could argue that if the learner has failed to grasp a concept, it is a failing on the teacher's part rather than on that of the learner. This discussion is the point when a teacher can get feedback on *his or her* own abilities. This could be viewed as an onerous task, but if you have built-up an honest relationship during the day, the learner should feel able to offer the teacher some honest and constructive feedback.

Key thoughts

Think of yourself as a facilitator for learning rather than as a teacher. Verbalise the learning opportunities available and remember you are a role model. Encourage feedback and reflection, and reflect on your own teaching sessions. We are all continuously learning throughout our professional lives, we have had to learn our craft, helping others to learn is a skill like any other.

Evidence of Progression

Basic level

- Supervise a more junior doctor performing a skill. Complete a Workplace Based Assessment for them. Offer constructive feedback. Critically reflect on your role in this conversation.

Intermediate level

- Think about your last teaching list (You could be the learner or teacher). Try to identify 3 learning outcomes (1x knowledge, 1x skill, 1x attitude). How could the session have been improved upon educationally?

- Write a reflective piece on this teaching session for your education portfolio.

Higher level

- Plan a teaching list for a more junior doctor. Think about the possible learning outcomes. After completing the list, offer time for feedback and evaluate the session. Teach a skill and give feedback. Ask someone to observe this encounter.

- Conduct a feedback session using his or her observations regarding your teaching skills.

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RCoA 2010 Syllabus Key

TM_BK_07 Describes the difference between learning objectives and outcomes.

TM_BS_08 Delivers informal teaching in the workplace.

TM_BS_11 Demonstrates an ability to reflect and analyse constructive feedback from others regarding their own clinical knowledge, skills and behaviour.

TM_BS_12 Engages in opportunistic workplace-based learning and teaching.

TM_IK_03 Knows how to create a framework in which to teach a practical skill safely.

TM_IS_04 Provides appropriate clinical supervision to less experienced colleagues.

TM_HK_03 Knows how to plan a 'teaching list' for a more junior trainee.

TM_HK_14 Knows how to provide a level of clinical supervision appropriate to the competence and experience of the trainee.

TM_HS_05 Demonstrates effective lecture, presentation, small group and bedside teaching sessions.

TM_HS_07 Engages in opportunistic teaching of more junior trainees in clinical settings.

TM_HS_10 Supervises junior trainees in the course of routine and emergency.

Aims

This chapter sets out to identify where appropriate assessment and effective feedback sit within the educational process. It covers the basic principles of assessment and attempts to equip the reader with the tools used in the effective assessment of others.

Intended learning outcomes

By the end of this chapter you should have a better understanding of:

1. The importance of assessing and evaluating learning (TM_HK_08).

2. The importance of feedback for learning, in both the classroom and workplace (TM_IS_07, TM_HS_15, TM_HS_17).

3. The process and purpose of workplace-based assessments (WPBA) (TM_BK_04, TM_BS_04, TM_IK_07, TM_IS_05, TM_HK_09, TM_HS_13).

4. How to critically reflect on your own clinical and educational practice (TM_BS_04, TM_HS_15, TM_HS_16, TM_HS_17).

5. How to provide timely, specific and developmental feedback, based on 'good' judgement (TM_IK_06, TM_IK_07, TM_IS_07, TM_HK_10).

6. The important role of WPBAs within the RCoA 2010 Curriculum (TM_HK_06, TM_HS_14, TM_HS_15).

Activity

Basic - Using the table below critically appraise each assessment tool. For each tool, indicate whether it measures knowledge, skills and/or behaviours, and also indicate which assessment tools measure competent activity in the workplace, i.e. performance.

Assessment tool	Competence			Performance
	Knowledge	Skills	Behaviours	
MCQ				
SAQ				
OSCE				
VIVA				
DOPS				
CBD				
A-CEX				
ALMAT				
MSF				

Intermediate – Using the DOPS and A-CEX assessment tools on your next solo list, self-assess a skill and clinical encounter after the event. Use the forms as they are intended, filling them out honestly; then reflect on what you have written about your own performances.

Higher – Revisit Pendleton's "rules" for offering feedback (Pendleton 2003). Use this technique next time you offer someone constructive feedback. What are the advantages of this framework? What are its drawbacks?

Introduction

The GMC places a strong emphasis on assessment being an important skill for any doctor with an educational responsibility:

> *'You must be honest and objective when appraising or assessing the performance of any doctor, including those you have supervised or trained. Patients may be put at risk if you describe as competent, someone who has not reached or maintained a satisfactory standard of practice.'*
>
> (GMC 2010)

In 2002, the Department of Health published a report called *Unfinished Business* written by the then Chief Medical Officer, Sir Liam Donaldson (2002). It highlighted some of the disadvantages of the Senior House Officer (SHO) grade and called for postgraduate medical education to become more measurable and accountable.

Donaldson suggested that there should be a greater emphasis on competency-based assessment throughout the whole of postgraduate training and that this would act as evidence to support successful completion of training.

Competency based training was introduced shortly after the publication of Donaldson's report, and ever since there has been great debate surround what is actually meant by: *competence* and *competencies* and *competency based training*.

Competency and *competencies* may be defined as:

> *'The technical attributes and behaviours that individuals must have, or must acquire, to perform effectively at work.'*
>
> (CIPD 2012)

In 2010, a group of collaborators called the International Competency Based Medical Education (CBME), defined competence-based education as:

> *'An outcomes-based approach to the design, implementation, assessment and evaluation of a medical education program using an organising framework of competencies'.*
>
> (Frank 2010)

The Royal College of Anaesthetists (RCoA) has produced a competency-based curriculum (RCoA 2010), which sets out specific: **knowledge, skills, attitudes and behaviours** that must be achieved during an anaesthetic training programme in order to obtain a Certificate of Completion of Training (CCT). The RCoA curriculum can be seen as a dissection of what makes a 'good anaesthetist' and a set of standards against which it is possible to measure an individual's performance.

These competencies are identified as learning outcomes that can be achieved using a mixture of workplace-based assessments (WPBA), exams and regular reviews of progress. It

is assumed that the workplace (and the simulation suite) will offer all the necessary experiences that a trainee will need in order to achieve their competencies. Importantly, progress is said to be *competency* based, not *time* based, which in theory offers faster progression for those doing well, and deferment of progression for those deemed unsatisfactory for their stage in training (Brightwell 2012).

Task

Consider an occasion when you have been assessed clinically.

- How was the assessment carried out?
- How did it enable you to improve your performance?

Performance vs competence

There is a hierarchy of **knowledge**, necessary before you can perform a task. This is known as Miller's Pyramid (Miller 1990). Ones ability to *do* something may be inferred from *showing* someone how you would do it. This in turn requires knowledge of *how* to do a task, which in itself requires *basic knowledge* of the task, see Figure 1.

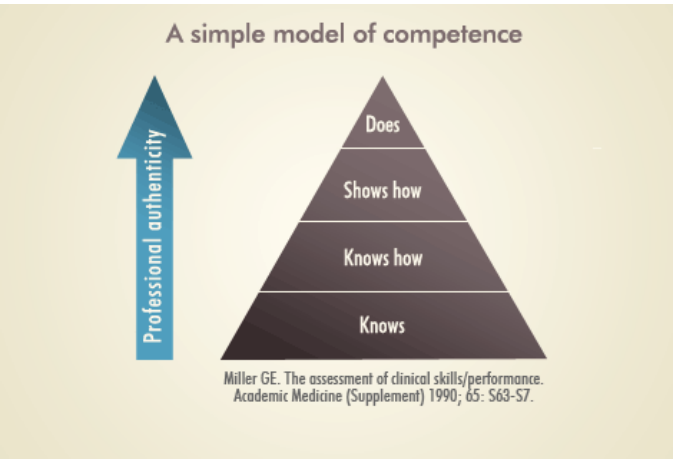

Figure 1. Miller's Pyramid of Competence.

Some have argued that what doctors do in controlled assessment situations (for example when being observed "delivering" anaesthesia in an OSCE station) correlates poorly with their actual performance in the clinical environment (Rethans 2002). The implication is that although they are more challenging to implement, assessment methods should ideally focus

on the top end of the pyramid, actual performance, which is where workplace-based assessments come in. This is in contrast to traditional assessment methods, such as examinations, that tend to assess only knowledge and basic understanding.

Task

Consider the Initial Assessment of Competence (IAC) used by the RCoA as the first milestone in the anaesthetic training programme (RCoA 2010).

- How is this form used?
- What are the benefits?
- What are the drawbacks of this assessment tool?

Functions of assessment

Assessment has a number of functions but it also has consequences and will inherently influence the learning process:

- It is a measure of progress or academic achievement.
- It allows a teacher to determine whether a learner has achieved the required standard of performance or competence.
- Assessment can be used to encourage student effort and will drive the learning process through feedback on strengths, weaknesses and the effectiveness of their learning.
- The style of assessment e.g. MCQ, OSCE or WPBA will influence the methods used by students to understand and apply their knowledge. This can encourage good, as well as poor, approaches to learning.
- Assessment is one way of evaluating course and/or teacher effectiveness, or identifying problem areas in the curriculum.

Forms of assessment

Formal/Informal

Postgraduate examinations are a formal type of assessment. They are designed to be as objective as possible and their purpose should be made clear to both assessor and the assessed. Supervision on a theatre teaching list may be regarded as an informal type of

assessment, with the assessor making a more subjective judgment of the assessed, who may or may not be aware that an assessment is taking place. WPBAs lie somewhere in between formal and informal assessment types and offer structure and objectivity to the daily assessments made by supervising colleagues.

Formative/Summative

Assessment may be formative or *for* learning, or summative or *of* learning. Formative assessment informs the learner of their progress through a course or during the acquisition of a new skill. It allows guidance toward a goal, or the redirection of effort. An underlying principle of these assessment types is one of encouragement. Summative assessments measure performance, often against a standard and data can be used to rank or judge individuals.

> **Reflection**
>
> Spend a moment thinking about formative and summative assessment and where postgraduate examinations and WPBAs fit into this structure.
>
> - Could exams be considered formative?

A 'useful' assessment tool

Assessment is an integral part of education and the usefulness of an assessment tool has been defined as the product of its reliability, validity, fidelity and educational impact (Van der Vleuten 1996). The term 'feasibility' has also been added to this list:

Reliability - assuming a constant curriculum, does the test demonstrate stability? Would the same result have been achieved if the assessment were repeated with different examiners in a different setting?

Validity - is the assessment fit for purpose and appropriate? Does it test what it is supposed to, and does it contain a representative and comprehensive range of components that need to be assessed e.g. behaviours, attitudes and knowledge.

Fidelity - is the test an accurate representation of real life or clinical activity?

Educational impact - what are the effects on teaching and learning?

Feasibility - does the assessment require prohibitive resources in terms of time, cost or staffing to achieve a result? Is it practical to run?

Assessment design should pay attention to all the above elements, although there may be a trade-off between elements. Traditional approaches to assessment could be accused of attempting to maximize reliability and feasibility to the detriment of fidelity and educational impact. WPBAs can offer high educational impact but might not be performed as reliably as other medical assessments.

Workplace based assessments (WPBA)

The first commonly used WPBA was the Initial Assessment of Competency (IAC), implemented by the RCoA. It is a formal, summative assessment using criterion referencing (as opposed to norm-referencing). The IAC must be passed prior to undertaking anaesthesia without direct supervision.

Following the introduction of the Foundation Year training system, and a study of assessment techniques, in 2010 the Royal College of Anaesthetists introduced more formative tools and documentation for use in clinical practice. These tools used as of 2013 are:

- Multi-Source Feedback (MSF)
- Anaesthetic Clinical Evaluation Exercise (A-CEX)
- Direct Observation of Procedural Skills (DOPS)
- Case Based Discussion (CBD)
- Anaesthetic List (or Clinic/Ward) Management Assessment Tool (ALMAT)
- Acute Care Assessment Tool for ICM (ICM-ACAT)

The WPBAs sample the syllabus for each unit of training and are used as evidence of progression. The assessments should relate specifically to the trainees current unit of training. These assessments are taken into consideration when determining whether a trainee has achieved the minimum clinical learning outcomes defined for that unit of training and if the Clinical Supervisors end of unit Assessment Form (CSAF) can be issued. Both the MSF and CSAF are particularly useful for gathering information about the trainee's professionalism, communication skills and team working.

The A-CEX, DOPS, and ALMAT focus on observed behaviour in the clinical setting and they offer a structure for the supervisor or teacher to document and monitor performance and provide feedback to the learner. No single instrument can or should be used to access competency, instead various instruments should be used to build up a picture of someone's medical competence. It is also important to remember that the expectation is not for every WPBA to be 'passed'. Learning is a journey and these assessments should reflect this.

Standards

A well-recognised assessment tool, often seen as the bridge between formal examinations and workplace based assessments, is the Objective Structured Clinical Examination (OSCE).

It was designed as a summative tool for assessment of clinical skills away from the workplace. The OSCE highlights some of the innate difficulties surrounding standardising assessments.

In an OSCE, performance is measured against a 'standard of adequacy' using a checklist or rating scale. When designing an OSCE, a subjective decision must be made about what is 'good enough'. This identifies the *standard of adequacy* and subsequently helps to generate criteria against which actions may be measured. An arbitrary point is placed between *acceptable* and *unacceptable* practice, despite the knowledge and understanding that proficiency in a skill is actually a continuum.

This subjective boundary between acceptable and unacceptable practice is prone to interpretation discrepancies and it is not difficult to imagine that bias could be introduced into an assessment system.

It is well recognised that *experts* can recognise expertise in others, and can also decide where this point lies (Christie 1982). It would therefore seem appropriate for clinicians to be involved in setting the standards of adequacy and also play a key role in the assessment of candidates. However, one of the criticisms of WPBAs is that they are subjective and that the criteria against which a trainee is being assessed changes with each assessor. If a system is to be defensible and controllable, assessment criteria should be made as clear and unambiguous as possible and observations should be frequent and use multiple observers.

Criticisms of Competency Based Assessment

Assessment of competence has become a global phenomenon in medical education, where a syllabus has been distilled into competencies - a series of discrete activities that people need to posses. These skills, knowledge, attitudes and behaviours have been deemed necessary to achieve in order to engage effectively in a vocation, for example, in anaesthesia.

The implication is that behaviour can be objectively and mechanistically measured to determine progress through and exit from a programme of training. In order to measure these identified traits, each has to be broken down into smaller and smaller units. The result is often a long list of *context specific* skills that focus on the parts rather than the whole. There is concern that this style of training and assessment emphasises the possession of specific attributes rather than a principled, holistic approach to a clinical situation. The argument being, that with the act of *deconstruction* sometimes comes *destruction*.

Feedback

The ability to deliver high quality feedback is one of the most important skill-sets that a trainer must acquire. Without effective feedback, a learner may not appreciate when they are performing both correctly and incorrectly. Parsloe (1995) suggests the importance of

feedback, as part of effective communication, without which the learner may repeat activities without any improvement in performance:

> *'Communication is a two-way process that leads to appropriate action… in the context of developing competence, it is not an exaggeration to describe feedback as 'the fuel that drives improved performance'.'*
>
> (Parsloe 1995)

Feedback is a crucial part of experiential learning (Kolb 1984) and practice does not necessarily make perfect without feedback from a more experienced colleague, see Figure 1. The role of feedback is essential in the development of real understanding (abstract conceptualisation) prior to planning the next event.

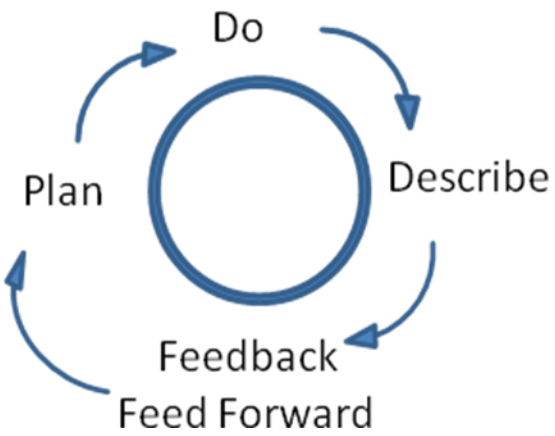

Figure 1: Illustration, utilising Kolb's learning cycle, of where feedback (and feed-forward) plays a role in experiential learning.

There are a number of factors that facilitate successful feedback. It is better:

- Invited than imposed
- Prompt than delayed
- Relevant than generic
- Private than public
- Descriptive than subjective
- More positive than negative
- Targeted than general
- Limited than wide-ranging
- Focused on behaviours rather than characters

Task

Consider the last time you received feedback.

- How did it differ from the above list?
- How would you have liked the feedback delivered?

Types of feedback

Successful delivery of feedback is as much about using active listening skills and non-verbal communication as offering an opinion. Learning points become much more powerful if they are initially recognised and disclosed by the learner themselves.

Useful verbal cues to employ in feedback discussion include: clarifying, repetition and summarising. These can help to open up discussion and encourage valuable dialogue. All feedback should; focus on what actually happened (rather than on opinion and conjecture), be honest and specific and must concentrate on the things that can be changed, whilst also bearing in mind the emotional components of a given situation.

The generic statement; **'well done'** is as equally unhelpful as the phrase **'that wasn't very good'**. These sorts of phrases do not inform the learner which areas were and were not of the appropriate standard, nor do they provide any guidance as to what could be improved or which elements of the performance should be repeated to perpetuate good practice.

SUPPORT ⟷ **CHALLENGE**

The aim of feedback should be for individual development through a supportive yet challenging 2-way conversation.

Task

Consider feedback structures you have witnessed.

- How was the conversation conducted?
- What were the benefits and downsides of the structure used?

Models of giving feedback

Pendleton (2003) described one framework for giving feedback which became popular through its use in Life Support courses. **'Pendleton's rules'** (although never intended as such) are structured in such a way that positives are highlighted first, in order to create a safe environment. The facilitator then reinforces these positives. The learner then suggests what could be done differently, again followed by the person giving feedback. An advantage of this method is that the learner's strengths are discussed first, preventing defensiveness, and then weaknesses are dissected to offer opportunities for reflection.

However, this recipe has since been replaced by **Agenda-Led, Outcome-Based Analysis** (Silverman 1996) because it was felt that Pendleton's rules were too rigid and formulaic and less suited to healthcare professionals. In agenda-led, outcome-based analysis the principle is to identify what the learner wants help with. The initial question is particularly important in establishing the agenda. It must be open and un-weighted, for example: *'What would you like to talk about?'*.

The discussion is then directed towards achieving the learner's goals by encouraging self-assessment and discussing new theories and concepts at opportune moments. Early acknowledgement of difficulties, removes defensiveness and anxiety about negative feedback, and allows discussion to focus on the outcome that the learner is trying to achieve. This ensures that the learner is actively involved and not merely a passive recipient of advice.

Debriefing

Feedback is a way of discussing the outcome of the actions and behaviours witnessed. However, *debriefing* is the process of reviewing judgements and decisions, paying particular attention to the relative merits of different decisions. It does not involve assessment of the event, but rather helps to make sense of the event. Some suggest the difference between this and feedback is the absence of formative (or summative) assessment in debriefing.

Glossary of terms

- **Assessment**: a systematic procedure for measuring a trainee's progress or level of achievement, against defined criteria, to make a judgment about that trainee.
- **Competence**: to demonstrate abilities to the prescribed standard in a particular aspect of practice.
- **Competencies**: a group of descriptors of acceptable evidence relating to a particular area of practice.
- **Competency**: a single descriptor of observable evidence.
- **Competent**: to have demonstrated a standard of practice that is equal to the measure set for that stage of training.
- **Criterion referencing:** an assessment of performance that is interpretable in terms of a clearly defined domain of learning.
- **Norm referencing:** an assessment of performance that is interpretable in terms of an individual's relative standing within a peer group.
- **Performance:** whether you actually do something as part of your everyday practice.

Key thoughts

Assessment and feedback go hand in hand within the modern postgraduate training and education system. Change is a desirable outcome of any assessment system and is only possible through high quality feedback that promotes learning.

Evidence of progression

Basic level

- Look at what the RCoA 2010 Curriculum says about assessment and feedback, with particular reference to WPBAs. How should these assessment tools be used in the clinical environment?

Intermediate level

- Use each of the forms (CPD, A-CEX, DOPS, ALMAT) as they were intended. Reflect on each tool's benefits and limitations.

Higher level

- Offer a feedback session to a colleague. Then have *them* critique your feedback technique.

Further reading

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RCoA 2010 Syllabus Key

TM_BK_04 Knows the process and purpose of workplace-based assessment

TM_BS_04 Demonstrates self-critical review of their own clinical practice in the context of workplace-based assessments such as Multi-Source Feedback

TM_IK_06 Knows how to give and receive effective feedback

TM_IK_07 Knows how to perform WPBA for foundation and less experienced anaesthetic trainees

TM_IS_05 Appropriately performs workplace-based assessments for foundation trainees

TM_IS_07 Gives and receives effective feedback

TM_HK_06 Describes the assessment strategy employed by the RCoA in the context of their own learning and the learning of others

TM_HK_08 Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment

TM_HK_09 Understands the role of, and the appropriate conduct of, the workplace-based assessments

TM_HK_10 Understands the importance of providing timely, specific, non-judgemental and developmental feedback

TM_HS_13 Accurately and reliably uses the workplace-based assessment tools

TM_HS_14 Shows willingness to participate in workplace-based assessments and demonstrates a clear understanding of their purpose

TM_HS_15 Gives appropriate feedback for the purpose of training clinical professionals

TM_HS_16 Receives feedback appropriately for the purpose of self-improvement

TM_HS_17 Assesses the quality of teaching both classroom and workplace-based and records this in their reflective portfolio

TM_HS_19 Maintains honesty and objectivity during appraisal and assessment

Aims

This chapter explores the set of values that underpin professional behaviour in anaesthesia and explores ways in which learning can be promoted in the clinical environment.

Intended learning outcomes

By the end of this chapter you should have a better understanding of:

1. The values that underpin professional behaviour (TM_BK_01, TM_BK_02, TM_HK_02, TM_HK_11, TM_HS_03, TM_HS_22).

2. The behaviours that match these values (TM_BS_13, TM_IK_04, TM_IK_10, TM_IS_06, TM_IS_09, TM_HK_12, TM_HS_09, TM_HS_20).

3. The frameworks that can help the learner reflect on his/ her performance in terms of these behaviours (TM_BS_10, TM_BS_11, TM_BS_14, TM_BS_16, TM_IK_01, TM_IK_08, TM_HS_24).

4. The learner will be expected to evaluate his or her own local learning culture (TM_BK_08, TM_BS_09, TM_IS_08, TM_HS_17, TM_HS_19, TM_HS_25).

5. The learner will become familiar with some strategies that may bring about positive change in the learning culture (TM_BS_02, TM_IK_11, TM_HK_04, TM_HK_14, TM_HS_01, TM_HS_08, TM_HS_26).

Activity

Basic – Try to remember the last time you returned from a coffee break or when a colleague left you in charge of a patient. Write down what *types* of information were conveyed in the handover? What made you feel comfortable about the exchange? Had the current plan been communicated to the other members of the theatre team? How could the conversation have been conducted better?

Intermediate – Identify someone whom you view as a 'good' anaesthetist or 'role model'. What characteristics make this person someone whose behaviour you would aim to replicate?

Higher - Think of an occasion when you had a clash of professional and personal commitments. How did you decide what to do? Has there ever been a time when you made the wrong choice? If so, what did you learn from this event?

Introduction

Although we all consider ourselves professionals, many clinicians have difficulty articulating what is actually meant by 'professionalism' and how this might translate into the everyday world of clinical practice.

The concept

Consider the connection between a used car salesman and their client. We will use this analogy to compare and contrast the relationship between professionals and their clients, or doctors and their patients.

Analogy

There is an equality of power between the second-hand car dealer and the client. The dealer has the car but the client has the money. The client has the option to take their custom elsewhere. The client may know a lot or little about cars. If the client does not know very much about cars and is sold a second hand car under false pretences, then the client may choose to seek redress from the various regulatory agencies. However, if the client chooses a car that turns out to be inappropriate for his or her needs, then that is the client's responsibility, rather than the dealer's.

The relationship between a used car salesman and their client is one where each party has an equal division of power within a regulatory framework of consumer rights. In contrast, a professional person is perceived to have knowledge and expertise beyond that of their client. In such a relationship, there is the potential for the professional to have more power or positional authority than the client and in such a relationship, there is the potential for that power to be abused. The relationship between a patient and his or her doctor must therefore be based on 'trust'.

A client trusts the professional to provide a valuable service and the professional in return agrees to practice to a certain code of conduct that will not exploit that power difference to the professional's advantage.

At the level of society, it is the responsibility of the members of a profession to determine whether the behaviour of any individual member is within the accepted code of practice. Professionals also use the autonomy, granted to them by society, to decide how best to respond to the needs and demands of their clients.

In the case of anaesthesia here in the UK, the expansion of our clinical domain to include pain management and peri-operative care, came from within the profession itself. Nobody from outside anaesthesia told us to do it; anaesthetists identified the problems, developed solutions and built up a body of expertise from which came institutional change.

Like most professionals, doctors are said to have a 'fiduciary' relationship with their patients; a relationship built on trust and confidence. Each party *trusts* that their counterpart will fulfil their individual obligations. A second-hand car salesman may adhere to a *voluntary* code of practice or they may not, but the consumer must rely on a legislative framework to ensure their rights are being recognised. Professionals, on the other hand, choose to work within a 'code of practice' and the regulatory framework comes mainly from within the profession.

Code of practice

A patient is entitled to expect that a doctor will adhere to a 'code of practice'. This *code* is an explicit statement of what the public can expect from the profession and its practitioners.

The last ten years have seen projects in Canada (RCPS 2001), the USA (ACGME 2013) and the UK (GMC 2010) begin to set out a template for the different roles or professional domains of medical practitioners working in those countries.

The Canadian and US frameworks both suggest doctors should demonstrate a commitment to their professional responsibilities as well as to their patients. Interestingly, the General Medical Council does not have 'professionalism' as one of the duties of a doctor, but it does codify the principles by stating that:

> *'Good Medical Practice sets out the principles and values on which good practice is founded; these principles together describe medical professionalism in action. The guidance is addressed to doctors, but it is also intended to let the public know what they can expect from doctors.'*
>
> (GMC 2010)

David Stern, an expert on the subject, describes medical professionalism as:

> *'A set of core values that have as their foundation clinical competence, communication skills and an ethical and legal understanding.'*
>
> (Stern 2006)

The core values he lists are: excellence, humanism, accountability and altruism. These are fine sounding words, but when we try to look for behaviours corresponding to each of them in the day-to-day world of clinical anaesthetic practice, we may have a bit more difficulty. Ambiguity may exist in the interpretation of these terms or an observed action may be erroneously ascribed to a particular underlying value.

Professional Behaviours

Observing behaviours is only the beginning of the story, when trying to ascertain whether others possess desired values, whilst helping them to become aware of and develop those that they do not. The observed episode should be used as a platform to engage in a dialogue that can be used to discuss those core beliefs suggested in, or by, an individual's behaviour. This process is made more straightforward by having a shared framework and a common language to describe the focus of training and development.

Analogy

Engaged in a conversation about the cinema and comparing enjoyable films, one would probably refer to aspects of a film such as: dialogue, the characters, plot, the pace of the story, the camera work and the sets. The conversation may not actually include any of these exact terms but the framework would be present and would be influencing the dialogue even if the specific terms remained unspoken.

It is easy to discuss conventional aspects of the curriculum with colleagues, such as pharmacology or physiology, and the underlying knowledge from which these principles are derived, as there is a reasonably clear and shared framework. However, most of us are less comfortable when it comes to discussing non-technical skills or behaviours and their underlying values.

A 'value' framework

Our *actions* are driven by *needs* and *motives*; these in turn will be influenced by our innate and acquired beliefs and values. We can describe the values that influence our actions in the workplace as belonging to three distinct categories; *personal* values*, professional* values and *institutional* values.

Personal values are those core beliefs that are important to us as individuals and will be influenced by our cultural background, social roles (partner, parent or friend) and all the other things, which matter to us. As indicated above, professional values are those core behaviours expected of an individual by virtue of being part of a professional body. Institutional values will be influenced by the goals of the organisation in which we work. Many of the problems that arise in professional behaviour do so when there are clashes between values from these different categories.

Analogy

Imagine an ST5 grade anaesthetist who has just completed a solo theatre list that included a patient who had undergone an extensive orthopaedic and plastic surgical procedure. The case had overrun but the patient is now in the recovery area, albeit later than expected. The anaesthetist had earlier promised their spouse and child that they would attend a dance display, which has, by this point, already started. The anaesthetist is contacted, whilst changing, to be told that the patient is desaturating.

What will/should our anaesthetist do?
What behaviours do we expect our ST5 or indeed any level of anaesthetist?

Consider instead if the personal commitment was to attend their child's hospital appointment and our patient was a chronic pain sufferer, experiencing mild pain everyday and is now reporting a moderate pain score. The hospital in question is staffed by a senior registrar through out the night and an appropriate acute pain protocol has already been commenced.

Would or should this alter the ST5's decision or behaviour?

Should decisions like this be affected by circumstances? For example: the severity of the clinical problem or importance of the personal commitment or indeed the level of support available in the hospital?

Any judgement or *assessment* of this colleague will be influenced by the set of circumstances prevailing on this or any other occasion and it may not be so straightforward to say which behaviours are acceptable and which ones are unacceptable.

When should professional and institutional values override the personal ones? One might easily imagine a set of circumstances in which the personal values may override the professional values in the above case.

We can see from the above example how difficult assessment can become especially when the assessor may have a different perspective on the relative merits of the value-sets from the person being assessed. How representative are one colleague's rankings of a set of values when compared to their peers? This aspect of our practice has a substantial measure

of subjectivity when compared to some of the other elements reviewed in Workplace Based Assessment tools. It is therefore not surprising that many assessors feel uncomfortable when they are providing written and verbal feedback on professional behaviour. This area of the curriculum presents some major challenges to both the assessor and to those being assessed.

Teaching values

As clinicians and members of one of the oldest professions, we have a responsibility within the code of practice to promote "good" behaviour. We should make every effort to promote professional values in our learners but what about personal values? Education is about helping people develop themselves through awareness raising, understanding and application.

If an individual does not want to change their behaviour to act in a way that is consistent with the agreed professional values, then our ultimate sanction might be to remove them from the profession. An anaesthetist who deliberately and knowingly puts patients at risk, for example, by leaving anaesthetised patients unattended, would have no place within our specialty.

As advocates and teachers within our profession, each of us must behave in a way that is consistent with the values that we promote. We can help by making such behaviour explicit when necessary. We may have to modify or make our behaviour more explicit when working with novices to get some of these important points across.

Reflection

'Do what I say not what I do……..'

When teaching a novice anaesthetist the 'rapid sequence technique', what do you teach?

Should a novice be taught the *textbook* rapid sequence using thiopentone and suxamethonium and without opiates or the technique that you most commonly employ (if it is not this)?

Analogy

When teaching a young child how to cross the road safely, we would make explicit the rule about only crossing when the 'green man' is showing and the road is clear. We would only cross at a pedestrian crossing and always wait until the 'green man' appears even if there were no obvious vehicles.

If we were crossing the road alone and the road were clear, then we would probably not pay attention to the crossing sign, however, we modify our behaviour when with and teaching young children.

This process fits in with 'normalisation' – the way in which we as humans learn how to behave in a new setting (Kugel 1969). We copy what other people do if we want to become part of that society or group. Sometimes the rationale or thinking behind the behaviours that we wish others to adopt may not be overtly apparent and providing a commentary can help to make them explicit. However, normalisation is more strongly influenced by what we *do*, rather than by what we *say*. If we say that it is wrong to read magazines in theatre but do so ourselves, then others will, most often, go with what we do.

In his book, Forgive and Remember, Charles Bosk (1979) describes how surgical training in an American hospital copes with *errors*. Bosk divides errors into two categories; errors due to poor technical skill or judgement and errors due to breaches of standards (normative errors). He writes:

> *'A technical or judgemental error then says something to the attending about a recruit's level of training; a normative error says something about the recruit himself'.*
>
> (Bosk 1979)

Bosk gives the example of an orthopaedic surgeon incorrectly positioning and draping a patient. If the error is technical, for example if he or she has not done it before, then the error would be corrected promptly and swiftly forgiven by the Attending (Consultant) physician. However, if the junior surgeon had been shown how to 'prep and drape' a patient correctly but chose not to, then this would be a *normative* error (or violation) and such behaviour would not be tolerated. In the training programmes studied by Bosk, habitual transgressions of normative behaviour resulted in removal from the programme.

While it is essential to obtain the proper technical skills and acquire good judgment during a training programme, a trainee is also learning the appropriate normative behaviours and acceptable standards. Interestingly, the Attendings at the institution studied by Bosk were not expected to be perfect, but they were expected to adhere to certain standards, and breaches of those standards resulted in disciplinary measures and sometimes even major career changes.

Role models

An American sociologist, Robert King Merton, is credited with creating the phrase 'role model', in a study on the socialisation of medical students, at Columbia (Merton 1936). Merton wrote about the concept of a 'reference group'. Individuals compare themselves to a group of people who occupy the social role to which they aspire, but do not necessarily belong.

Simply stated, a role model is an aspirational figure whose behaviour is emulated by others. An individual cannot choose to be a role model or indeed choose not to be one. The aspirational social group is often only one or two levels above the individual's current stage. For example, junior trainees often choose more senior trainee colleagues as their role models, rather than consultants, perhaps perceiving that at their current stage a consultant is too far removed from their aspirational social role.

Task

Think about someone who you see as a 'role model'.

- Why have you identified them?
    - Their knowledge?
    - Their Practical skills?
    - Something else entirely?
- What specific behaviours would you would like to emulate?

Assessing and developing behaviours

Behaviour assessment follows a sequence of: *observing* the behaviour, *discussing* the factors contributing to the behaviour and then finally *judging* the behaviour. It must be remembered that individuals will try to 'please' their observers and quickly learn how to modify their behaviour to meet approval. As a minimum, it at least demonstrates that the individual knows how they *should* behave. Finding out what a doctor is like when not being directly observed is difficult, however Multi-Source Feedback (MSF) tools may be of use here. MSF or 360 degree appraisal is a way of sampling opinion from a variety of different sources, not only from healthcare professionals but also from clerical and portering staff and more importantly, from patients (GMC 2012).

Reflection

Think about when you have worked with another anaesthetist. Were roles assigned during induction of anaesthesia? What might happen if no one assigned specific roles? As a team, did you run through any contingency plans?

Observation - It is easier to look out for something if we *know* what we are looking for. By identifying 'events' that occur regularly during a routine workload, one can build up a portfolio of occasions when observing an individual in the workplace can offer information regarding their clinical behaviour.

For example, observing a junior colleague during the 'first surgical stimulus' can yield valuable information about their planning, observational and anticipation skills. Is the individual engaged in another anaesthetic task, for example siting a larger bore cannula? Or are they engaged in a non-clinical task, such as checking the football scores on their smart phone? Or have they positioned themselves to enable observation of the anaesthetic machine, patient and the surgical team, opiate in hand, ready to deal with anticipated or indeed any unforeseen event post the first surgical stimulus?

Not only are these observations complex, but the behaviours being observed are composite. The junior colleague must have an appropriate working knowledge, previous experience, exercise good clinical judgement and have contingency plans for dealing with the unanticipated. The observer must then correctly unpick these behaviours in order to make an assessment about what he or she has observed and more importantly what they are thinking.

Discussion - Whether the observation is being performed as part of a formal Workplace Based Assessment or whether it is happening informally, additional knowledge will be shared by engaging in a dialogue. These conversations will enable the observed individual to unpick their behaviours, often acquired subconsciously, for use in other situations and the observer will be able to identify qualities that should be promoted and those that should be questioned or discouraged.

Judgement - The use of a framework to offer structured feedback is invaluable. The categories on the reverse side of the Workplace Based Assessment forms can act as a guide to offer feedback in a logical sequence. The Anaesthetists' Non-Technical Skills (ANTS) system (Fletcher 2003), can also offer a structure when making a coherent picture of an individual's actions.

Intrinsic values influence good professional behaviour. However, knowledge, judgement, non-technical skills and many external factors play a role. These must all be explored during

the dialogue phase, to really understand the thought processes behind the decisions made and why particular actions were carried out during a clinical encounter.

Earlier reference was made to the importance of the potential clash between professional and personal values. Discussion of personal values is not always easy. In fact it is something most of us shy away from, unless we have come to know an individual and establish a good working relationship with them. Current working patterns, including rotations and shift work, may limit the personal contact between a trainer and trainee. This may have an adverse effect on the development of an effective professional relationship, especially when mutual trust, which takes time to develop, is the cornerstone of that relationship.

A learning culture

At its most simple level, this can be defined as: an environment that promotes educational activity. This environment influences teaching strategies and assessment methods within an anaesthetic department.

As Kruse and Louis (2009) suggest, culture describes 'how things are' or 'how things operate'. A positive learning culture does not come from one individual but is born out of the outlook and effort of every member of a department or team. To improve the learning culture within an organisation, one must first appreciate the current situation and understand that a culture is inherited rather than created. Changing the way a department thinks and feels about educating trainees is a long-term venture and one where work is never finished.

In the same way that personal and professional values may clash, there may be conflict between institutional values and professional values. Professions and professionals are expected to develop the next generation of professionals and should aim, not only to maintain a high standard of practice, but also to raise that standard. Institutions, such as NHS hospitals, will have a variety of goals or targets, some of which may not overlap entirely with a core set of professional values.

With great pressure on NHS institutions to save large amounts of money, short-term financial targets can affect working practices. It is the responsibility of the profession to respond to these pressures and even more importantly to make explicit the professional standards which protect the safety of patients and enable the delivery of excellence.

Ideally, institutional values would enhance a learning culture and minimise the potential clashes between either personal or professional values. A learning culture is only possible if a critical mass of the more permanent anaesthetic staff is sufficiently committed to the educational process. Each member must engage in aspects of both formal and informal educational activities, such as the delivery of an induction programme or conducting Workplace Based Assessments, or listening to any concerns raised by junior staff or offering time to teach an under-developed skill.

Key thoughts

The difficulties inherent in maintaining or improving the professionalism of junior staff and creating a positive learning culture are varied and wide reaching. However, success breeds success. The quality of teaching, support and feedback, and the time spent on training activities, will be indicative of the strength and depth of positive behaviours created and therefore observed and will exhibit themselves in the choices made by these individuals.

Evidence of progression

Basic level

- Watch a video clip of your favourite TV medical drama, with a colleague, for example (ER 2009). Now discuss the positive and less-positive behaviours and values you have witnessed. What are the challenges to, and temptations away from the good behaviours?

Intermediate level

- Prospectively identify some key stages (induction, emergence etc) during a theatre list. Ask a colleague to observe your behaviour, rather than your clinical skills during these, and then feedback on your 'professionalism'. Ask them to use the reverse side of the A-CEX WPBA (RCoA 2010) or the ANTS system (Fletcher 2003), as a framework during the feedback session.

Higher level

- Design and run a 30-minute interactive workshop on 'Professionalism in the workplace'. Highlight key areas for the group to focus on and identify questions that will promote active discussion.

Further reading

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RCoA 2010 Syllabus Key

TM_BK_01 Knows that patient safety is paramount in all aspects of medical education.

TM_BK_02 Knows their roles and responsibilities as a trainee in the context of clinical governance and patient safety.

TM_BK_08 Knows how to engage in e-learning.

TM_BS_02 Seeks appropriate levels of supervision for themselves when undertaking activities in which they are not fully competent.

TM_BS_03 Demonstrates safe practice in patient management when teaching and supervising others.

TM_BS_09 Keeps a reflective portfolio of learning and clinical practice.

TM_BS_10 Appropriately solicits and receives feedback from others regarding their own clinical knowledge, skills and behaviour.

TM_BS_11 Demonstrates the ability to reflect and analyse constructive feedback from others regarding their own clinical knowledge, skills and behaviour.

TM_BS_13 In discharging educational duties acts to maintain the dignity and safety of patients at all times.

TM_BS_14 Demonstrates how to use information technology to keep up-to-date.

TM_BS_16 Uses on line e-assessment tools.

TM_IK_01 Knows how to design and implement a personal learning plan for an educational activity related to their own learning.

TM_IK_04 Knows that personal and team performance is affected by non-technical skills and knowledge.

TM_IK_08 Knows the value of inter-professional learning in their own development and in the development other professional roles.

TM_IK_10 Lists the basic concepts and role of human factors and team-based training including crisis resource management in ensuring patient safety.

TM_IK_11 Knows the value of inter-professional learning.

TM_IS_06 Engages with and contributes to inter-professional learning opportunities.

TM_IS_08 Performs self-critical reviews of their own educational practice (workplace based teaching, tutorials, simulation training or lectures).

TM_IS_09 Participates in human factors and patient safety training.

TM_HK_02 Knows the importance of always ensuring safe supervision of learners and takes wide responsibility for this including checking the safety of any teaching being undertaken by trainee anaesthetists within their clinical arena.

TM_HK_04 Understands how to use a wide range of educational methods to provide effective clinical learning opportunities, such as: opportunistic workplace-based training, lectures, part- and whole-task simulator training, full immersion high fidelity simulation, audio-visual feedback and behavioural debriefing.

TM_HK_11 Explains the importance of their own behaviour as a role model for more junior trainees.

TM_HK_12 Recognises the importance of personal development as a role model to guide trainees in aspects of good professional behaviour.

TM_HK_14 Knows how to provide a level of clinical supervision appropriate to the competence and experience of the trainee.

TM_HS_01 Teaches trainees and others in a variety of settings to maximise knowledge, effective communication and practical skills; and to improve patient care.

TM_HS_03 Shows consideration for learners including their emotional, physical and psychological well being with their development needs; acts to endure equality of opportunity for students, trainees, staff and professional colleagues.

TM_HS_08 Engages in simulator-based learning.

TM_HS_09 Assists in simulator-based teaching.

TM_HS_17 Assesses the quality of teaching both classroom and workplace-based and records this in their reflective portfolio.

TM_HS_19 Maintains honesty and objectivity during appraisal and assessment.

TM_HS_20 Provides appropriate career support, or refers trainee to an alternative effective source of career information.

TM_HS_22 Participates in strategies aimed at improving patient education e.g. talking at support group meetings.

TM_HS_24 Demonstrates a willingness to advance own educational capability through continuous learning.

TM_HS_26 Balances the needs of service delivery with education.

TM_HS_25 Acts to enhance and improve educational provision through evaluation of own practice.

The Royal College of Anaesthetists

Aims

This chapter will define and explain the role(s) of an Educational Supervisor and how one might provide effective support. It will outline the key processes involved in supervision including structuring face-to-face meetings and establishing a learning agreement.

Intended learning outcomes

By the end of this chapter you should have a better understanding of:

1. The principles of Educational supervision (TM_BK_06).
2. How to actively participate in your own Educational supervision (TM_HK_07).
3. How to develop your own learning targets and assess whether these have been met (TM_HK_08).
4. The difference between formative and summative assessment (TM_HK_08).
5. How to provide and receive verbal and written feedback based on Workplace Based Assessments (WPBA) (TM_HK_14).
6. The purpose and potential of developmental conversations (TM_HS_18).
7. The personal and professional needs of both yourself and others and how to signpost where that support can be found (TM_BK_06).

Activity

Basic – Consider how different types of supervision affect/impact on your professional practice. Reflect on the hierarchy of all those who you supervise and who supervise you. What would you see as the key elements of effective supervision?

Intermediate – Think about the last Educational conversation you had. Try to highlight how effective communication helped this process. What were the elements that hindered the conversation?

Higher – What is an Educational contract? Write down (and then achieve) five Educational outcomes for the next two months.

Overview

As soon as you become fully registered with the General Medical Council (GMC), part of your professional responsibilities will involve working with and supervising more junior doctors (GMC 2010).

A Supervisor is someone who oversees the performance and development of others; in the context of medicine, with a view to extending their professional skills and Clinical understanding (London Deanery 2011). However, like most skills, supervision expertise is not necessarily inherent and needs to be developed. Improvement comes with education, focused development and experience.

Reflection

Spend a moment thinking about how you have developed your teaching and supervision skill-set since qualifying as a doctor. What are the active verses the more passive processes?

Communication

Effective communication, using non-judgmental, constructive discussion, is an essential skill-set for both Supervisor *and* supervisee to acquire.

Task

Consider the phrases below. What do you understand by these terms?

- Constructive discussion
- Non-judgmental style

By communicating with clarity, and this includes seeking confirmation of understanding, we become more effective and reduce the frequency of errors arising from misunderstandings (Fernandez 2008). Clear and explicit instructions at the start of a meeting, module or learning event, and insight into the expected outcomes, will help to ensure there are no misunderstandings.

Establishing a relationship, based on trust and mutual respect, will help to reduce the tendency for the learner to perceive constructive feedback as a personal indictment; but rather as a way to encourage a culture of explicit feedback and self-reflection, based on the principle that changes in Clinical practice can lead to improved patient outcomes.

Task

Try to define, then compare and contrast the supervision types given below:

- Clinical supervision
- Educational supervision

Medical supervision

Educational and Clinical supervision are formalised, essential components of the supportive process that will facilitate a learner's progress through postgraduate medical education (MMC 2010). **Clinical supervision** has been defined as:

> *'An exchange between practising professionals to enable the development of professional skills'.*
>
> (White 2001)

Educational supervision has been defined as:

> *'The provision of guidance and feedback on matters of personal, professional and Educational development in the context of a trainee's experience of providing safe and appropriate patient care'.*
>
> (Kilminster 2007)

The GMC, through the Gold Guide (2010) offers practical guidance on these roles.

- **Clinical Supervisor**: A trainer who is selected and appropriately trained to be responsible for overseeing a specified trainee's Clinical work and provides constructive feedback during a training placement.

- **Educational Supervisor**: A trainer who is selected and appropriately trained to be responsible for the overall supervision and management of a specified trainee's Educational progress during a training placement or series of placements. The Educational Supervisor is responsible for the trainee's Educational Agreement.

(Some training schemes appoint an Educational Supervisor for each placement. The roles of Clinical and Educational Supervisor may then be merged).

The GMC stipulates a seven domain competency framework, originally published by the Academy of Medical Educators in *'A Framework for the Professional Development of Postgraduate Medical Supervisors'*, to provide a structure for required standards (AoME 2010). The domains are:

1. *Ensuring safe and effective patient care through training*
2. *Establishing and maintaining an environment for learning*
3. *Teaching and facilitating learning*
4. *Enhancing learning through assessment*
5. *Supporting and monitoring Educational progress*
6. *Guiding personal and professional development*
7. *Continuing professional development as an educator*

Educational Supervisors are to meet all criteria and Clinical Supervisors will need to fulfil criteria 1, 2, 3, 4 & 7.

The GMC also highlights the distinction made between *named* Educational or Clinical Supervisors, and Supervisors of trainees for any given Clinical session, so called **Sessional Supervisors**. A Sessional Supervisor offers high quality learning in the workplace but unlike an Educational or Clinical Supervisor, does not require external/formal recognition or additional training to perform their role. The chapter on 'Teaching and learning in the workplace' further develops the key ideas surrounding Sessional Supervision.

Practicalities

With respect to anaesthesia, a Sessional Supervisor oversees a single learning event, such as a theatre list or clinic; a named Clinical Supervisor oversees a collection of linked learning events in a module or block and a named Educational Supervisor is responsible for the overall professional and personal development of a particular learner, during a hospital placement or group of placements. These three processes are linked together at the end of each year in the **Annual Review of Competency Progression** (ARCP) where the Educational Supervisor's 'Report' is added to a learner's training portfolio.

At the start of a training module an Educational Supervisor will review a learner's training to

date and then signpost the learning opportunities offered by the placement, modules and Clinical Supervisors. The meeting in the middle of a placement or module is a formative process that looks at what has been achieved so far and how to make the best of the time remaining.

At the end of a placement, an Educational Supervisor will help a learner to decide how to develop in the next phases of their training and will also offer an analysis of overall progress. The task of connecting sessions, modules and placements is made very much more straightforward if contemporaneous records are added to an organized and up to date training portfolio. This process is under pinned by recording all learning encounters, whether this is by completing the relevant workplace-based assessments, updating a logbook or writing a self-reflective piece.

The Educational Supervisor's Report offers information to help a trainee update their Personal Development Plan but it is also the link between the formative learning process, with happens during each placement, and the summative assessment which must be made at the end of each year of training, in the ARCP.

Other responsibilities

The definition of an Educational Supervisor given above (Kilminster 2007) suggests that *personal* and *professional* development is inter-connected with Educational development. A *successful* Educational Supervisor must also address these more pastoral elements if a placement or module is to be as valuable and productive as possible.

Educational conversations can often raise concerns about additional issues such as a trainee's career, particularly when the end of Specialty Training looms nearer. Discussions may include the need for further training, the current consultant job prospects or potential career aspirations.

Developmental conversations are part of the Educational Supervisor's role but care must be taken to distinguish these from other more specific support structures, such as counseling, coaching or mentoring. The generic skills, such as active listening, used in mentoring and coaching techniques can be extremely useful when applied to an educational conversation. However, if a trainee requires a different support structure, the role of the Educational Supervisor is to *signpost* where a trainee might receive the most appropriate help.

Barriers

Poor communication from both Supervisor and supervisee is often responsible for ineffective Educational supervision. A trainee may be wary of showing gaps in their training or areas of weakness, especially if a cultural, chronological or personality mismatch is perceived.

It is important for an Educational Supervisor to treat each trainee fairly and as an individual who feels listened to. This will cultivate a relationship built of trust and ensure lines of communication remain open. If the relationship between Supervisor and supervisee is unsuitable or breaks down, both parties need to know where to access a resolution. It may be that both individuals would benefit from reallocating the trainee and a Supervisor's services to someone else.

Educational conversation

A learner's needs change over the course of their training programme and their Educational conversations should evolve accordingly. At the start of training, a trainee may need more prescriptive guidance or generic advice on topics such as exams. As they near finishing, more individual and specific questions arise, for example, which sub-specialty career path to choose. Although an Educational Supervisor may have an opinion, on these occasions they should function more as a sounding board. By using probing questions, a Supervisor can unpick thought processes, facilitate the identification of possible options, and encourage an individual to think about their dilemma from new angles (Tomm 1988).

The seven Cs

Adapted from Launer (2006), the seven Cs illustrate how to successfully put supervision into practice.

Conversation - Effective conversations offer individuals the opportunity to rethink and reconstruct dilemmas and the ability to develop a new understanding of their problems.

Curiosity - This is the factor that advances *chitchat* into a more substantial exchange. A Supervisor must have an awareness of both the verbal and non-verbal elements of the conversation and adopt a neutral position. Probing questions are an attempt to understand the issues surrounding a particular dilemma from the trainee's perspective.

Context - Curiosity helps a Supervisor develop an understanding of a trainee's networks, their history, geography, beliefs and core values.

Complexity - Connections develop between people and events over time to create a *story*. Interest in how this story has evolved and the interactions between the key people will afford a clearer description of a situation, and help a Supervisor to understand the complexities contained within.

Creativity - Jointly helping to construct a new version of the story through the process of supervision will help both parties make better sense of the issues surrounding a problem.

Caution - The art of facilitating an Educational conversation is offering the appropriate level of challenge without being confrontational or seeming disinterested. Monitoring both

verbal and non-verbal responses to questions can help a Supervisor to gauge where they should probe deeper or enquire next.

Care - This encompasses both parties being respectful, considerate and attentive and ensuring supervision is carried out within an ethical framework.

Effective Supervision – a summary

There is evidence that:

- Supervision has a positive effect on patient outcomes and the lack of supervision is potentially harmful to patients
- Direct supervision can positively affect patient outcome and trainee development, particularly when combined with focused feedback
- Supervision seems to help trainees gain skills more rapidly
- Supervision has more effect when the trainee is less experienced; more complex cases may need more supervision
- Self supervision is not effective; input from a Supervisor is required
- The quality of the Supervisory relationship is extremely important. Especially important are continuity over time, supervisees control products of supervision (supervision may only be effective when this is the case) and that there is some reflection by both participants
- Trainees may try to manipulate the supervision process in ways which conflict with opportunities to learn and that may not be beneficial to patients
- Behavioural changes can occur relatively quickly as a result of supervision, whereas changes in thinking and attitude take longer. This is particularly important where there are relatively frequent changes of Supervisor
- Trainees are able to identify many gains from supervision

(Kilminister 2000)

Key thoughts

In essence, a Clinical Supervisor facilitates a formative process for a particular set of Clinical learning outcomes and an Educational Supervisor oversees a collection of these formative processes. With the addition of a summative judgment, this process constitutes effective training. These facilitative support processes are equally as valuable for the highly achieving trainee as they can be to a trainee who is struggling.

Supervision of trainees can take a variety of forms and not every valuable interaction has to be delivered by a Clinical or Educational Supervisor. However the GMC acknowledges the importance of these professional particular interactions and sets out clear guidance. They identify the necessary skill-set, advocate a robust appointment process and stipulate the need for appropriate training to enable these services to be delivered effectively.

Evidence of progression

Basic level

- Demonstrate that you have engaged with your own Educational supervision by addressing the objectives set out in your personal development plan and write a reflective paragraph on feedback you have received from a Clinical Supervisor.

Intermediate level

- Supervise a less experienced colleague in the Clinical environment. Have a developmental conversation afterwards that includes constructive feedback.
- Write a reflective piece. Try to focus on the elements of the conversation that enabled the interaction between you and your colleague.

Higher level

- After supervising a more junior colleague and offering feedback, ask for feedback yourself. Critique your supervision technique and then try to dissect out which areas of the feedback dialogue were most helpful.
- Ask a senior colleague to observe you while you supervise another. Ask this senior colleague for written feedback.

Further reading

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Appendix

Summaries of the **Effective** Named Clinical Supervisor and the **Effective** Named Educational Supervisor are given below. The number within the parentheses corresponds to the relevant Area (A1-7) of the 'Framework for Professional Development of Postgraduate Medical Supervisors', published by the Academy of Medical Educators and adopted by the GMC AoME (2010).

Effective Named Clinical Supervisors will:

- Understand their responsibilities for patient safety (A-1)
- Ensure no trainee is required to assume responsibility for or perform Clinical, operative or other techniques in which they have insufficient experience or expertise (A-2)
- Offer the level of supervision necessary to the competences and experience of the trainee and tailored for the individual trainee (A-2)
- Ensure that trainees only perform tasks without direct supervision when the Supervisor is satisfied that they are competent so to do; trainee and Supervisor should be aware of their direct responsibilities for the safety of patients in their care (A-2)
- Consider whether it is appropriate (particularly out of hours) to delegate the role of Clinical Supervisor to another senior member of the healthcare team. In these circumstances the individual must be clearly identified to both parties and understand the role of the Clinical Supervisor. The named Clinical Supervisor remains responsible and accountable overall for the care of the patient and the trainee (A-2)
- Be fully trained in the specific area of Clinical care (A-3)
- Be able to undertake, feedback and document appropriate assessments of these competencies (A-4)
- Understand their responsibility to maintain a dialogue with each trainee's Educational Supervisor (A-4)
- Be appropriately trained to teach, provide feedback and undertake competence assessment to trainees in the specialty (A-7)
- Be trained in equality and diversity, human rights best practice and information governance (A-7)

Effective Named Educational Supervisors will:

- Demonstrate all the qualities of an effective Clinical Supervisor (A-1-4, 7)
- Be adequately prepared for the role and have an understanding of adult Educational theory and practical Educational techniques (A-3)
- Provide and document regular non-judgmental feedback to each trainee so as to provide a clear record of their progress (A-4)
- Ensure the structured Educational Supervisor's Report is returned as part of a complete portfolio of evidence of curricular progression for the Annual Review of Competency Progression (A-5)
- Develop a learning agreement and Educational objectives with each trainee that must be mutually agreed. It is the point of reference for future appraisal (A-5)
- Be responsible for their Educational role to the training programme director and locally to the employee's lead for Postgraduate Medical Education (A-5)
- Understand their responsibility to maintain a dialogue with each trainee's Clinical Supervisor (A-5)
- Be responsible for ensuring that trainees whom they supervise maintain and develop their specialty learning portfolio in a timely manner (A-5)
- Be responsible for ensuring that trainees whom they supervise fully participate in the specialty assessment process, including its documentation (A-5)
- Provide regular appraisal opportunities which should take place at the beginning, middle and end of a placement (A-6)
- Contact the employer and Postgraduate Dean should the level of performance of a trainee give cause for concern (A-6)
- Be able to advise the trainee about access to career management (A-6)
- Be able to recognise when Mentoring, Coaching or Counseling might be valuable for both struggling trainees and those who are progressing well (A-6)
- Be trained to offer Educational supervision and undertake appraisal and feedback (A-7)
- Undertake training in the full range of competence assessment for specialty training (A-7)
- Be trained in equality and diversity, human rights best practice and information governance (A-7)

RCoA 2010 Syllabus Key

TM_BK_06 Knows the roles and responsibilities of their Clinical and Educational Supervisors and understands whom to approach locally regarding training issues and concerns.

TM_HK_07 Explains the roles and responsibilities of Clinical and Educational Supervisors and Consultant/SAS trainers.

TM_HK_08 Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment.

TM_HK_14 Knows how to provide a level of Clinical supervision appropriate to the competence and experience of the trainee.

TM_HS_18 Conduct developmental conversations as appropriate e.g. appraisal, supervision, mentoring.

TM_HS_20 Provide appropriate career support, or refers trainee to an alternative effective source of career information.

Aims

In this chapter we will explore the use of appraisal as an educational tool, the different definitions of appraisal, how the effectiveness of the process can be maximised for the appraiser and appraisee and the role of appraisal in revalidation.

Intended learning outcomes

By the end of this chapter you should have a better understanding of how to:

1. Outline the structure of an effective appraisal review (TM_HK_15).
2. Conduct developmental conversations as appropriate e.g. appraisal, supervision, mentoring (TM_HS_18).
3. Maintain honesty and objectivity during appraisal and assessment (TM_HS_19).

Activity

You have been asked to act as the Educational Supervisor for an F2 doctor who has been based on HDU/ITU for the last 4 months. The multi-source feedback, in this case using the mini-Peer Assessment Tool (mini-PAT) (MMC 2012), comes back with comments written in the 'cause of concern' section under the heading:

> *'Describe any behaviours that have raised concerns or should be a particular focus for development'.*

Both yourself and Dr X have access to the anonymised comments via their online portfolio. However you only see these comments the day before your final meeting with them:

> *'Dr X is very enthusiastic and keen to learn but sometimes doesn't take time to consider other doctors opinions. I am not sure that they can communicate effectively with their patients. I do not feel they are ready to work independently at this level.'*
>
> *'Dr X is always keen to teach, especially practical procedures. They are technically very good and they make satisfactory clinical decisions but they do not always consider the broader view. Their verbal communication with colleagues is sometimes abrupt, especially at times when Dr X is working in a stressful environment. Dr X would benefit from thinking through carefully what they wish to say and the manner in which it is delivered.'*
>
> *'Dr X was keen to see patients and seems knowledgeable. However they can get very stressed when things get busy and they do not seem able to prioritise tasks effectively, leaving a lot to be done after hours by on-call staff.'*
>
> *'This doctor has difficulty dealing with stressful situations. When under pressure they often become defensive and are unable to engage in reasonable discussions with patients and colleagues.'*
>
> *'Dr X answers their bleep promptly and is good at practical procedures. They are sometimes however, a bit over confident and they do not always listen to other peoples' opinions.'*

Basic - Put yourself in the shoes of Dr X. How would you initially react to the comments above? Group together the most useful points. Think about how you might reflect on or react to the constructive criticism of your performance.

Intermediate - Plan the structure for your appraisal meeting with this trainee. Write down the key points you would like to cover. How are you going to manage the feedback section of the conversation? What principles of feedback might you use?

Higher - How would you phrase your opening question/ statement for the feedback section? What options are available to the trainee to support their development? What outcomes could you anticipate from your conversation? How would you manage these?

Structure

Appraisal is not a new activity for any level or grade of doctor, however, it may not have been explicitly highlighted to you during your undergraduate or postgraduate training. Indeed it may have **occurred** to you without your awareness or understanding. One of the difficulties has been to try and define exactly what the appraisal process should look like for each level of doctor.

In the UK, the General Medical Council (GMC) has the responsibility of co-ordinating all stages of medical education. It has published a number of documents relating to the promotion of high standards in medical education and has made recommendations, which include: the need for regular meetings to discuss and plan training (GMC 2012) or Continuing Professional Development (CPD) (GMC 2012), and opportunities to discuss problems and provide feedback (GMC 2012).

In 1996, SCOPME (1996) produced a consultation document looking at appraisal for trainees. It made a number of recommendations including:

> *'Appraisal should be primarily educational, confidential and designed to assist an individual's progress.'*

Task

Think about the terms *Appraisal* and *Assessment*.

- How are these concepts different?
- In your experience, how are they interlinked?
- Using these terms, how would you describe the form and function of your ARCP?

The Guide to Specialist Registrar Training (DoH 1998) mentions both assessment and appraisal. It suggests that the outcome of assessment will inform the process of appraisal, which should lead to the development of a **Personal Development Plan** (PDP) with aims, objectives and outcomes. Further assessment can then be used to confirm whether an individual has achieved their PDP. However, *self*-assessment is a valuable part of the appraisal process and should be encouraged.

Continuing Professional Development (CPD) is the process by which those doctors, outside formal undergraduate or postgraduate training structures, keep themselves up to date and maintain the highest standard of professional practice (GMC 2012).

The Chief Medical Officer's report, 'Medical revalidation – principles and next steps' (DoH 2008) sets out the contribution that CPD should make to appraisal and revalidation. The report states that:

> *'Appraisal should focus on meeting agreed educational objectives.'*

And that:

> *'The GMC will require documented proof of CPD as an essential component of the information needed for successful appraisal and revalidation.'*

The RCoA have published a guideline for CPD (RCoA 2012). It states that:

- *Consultants must collect evidence to record their CPD activity.*
- *A structured portfolio will be reviewed as part of the process of appraisal and revalidation.*
- *Annual appraisal will inform a PDP, which will include future CPD activity.*
- *The CPD undertaken should reflect and be relevant to a doctor's current and future profile of professional practice and performance.*

Reflection

Think about a recent developmental conversation that may have included elements of appraisal. What qualities did the appraiser exhibit? How might the conversation have been even more productive?

Developmental conversation

The ability to **establish rapport, actively listen** and **empathise** with the appraisee is at the heart of good appraisal. The appraiser must really relate to their appraisee, hear, understand and also recognise what is not said. They must also avoid the temptation to interrupt, talk at the appraisee or jump to conclusions too quickly.

Feedback is another essential element of the appraisal process and the ability to deliver constructive critique and offer advice is an important skill for any appraiser (Mets 2003). However, appraisal must be owned and driven by the appraisee, related to the environment in which they work and address their individual needs.

Appraisers often agonize over discussing aspects of performance that have been identified as *'cause for concern'*. Although this can be a difficult part of an appraisal conversation, a small amount of preparation and thought by the appraiser can help to identify the learning points and make the discussion constructive. A personal development plan can then be agreed upon to help develop the appraisee during the subsequent year.

Revalidation

The GMC states:

> *'Revalidation will be our new way of regulating licensed doctors that aims to give extra confidence to patients that their doctors are up to date and fit to practice.'*
>
> (GMC 2012)

The RCoA believes that revalidation should be a **formative** experience and one that encourages Continuing Professional Development (RCoA 2012).

For trainees, revalidation will be incorporated into the Annual Review of Competence Progression (ARCP) process. Additional information will be collected regarding sickness absence, involvement in Serious Incidents and conduct issues.

For consultants, revalidation is due to start in the UK from December 2012. The outcomes of each annual appraisal will feed into the revalidation cycle. Every five years, a 'responsible officer' will make a recommendation to the GMC on a doctor's fitness to practice.

Key thoughts

Although the structure of the appraisal process is changing, and may well change again in your career, the principles underpinning a developmental conversation and the qualities needed by an appraiser to give constructive feedback remain resolute. Although uncomfortable, difficult conversations, if approached with care and attention, will offer the most value to appraisee, and appraiser alike.

Evidence of progression

Basic level

- Think about your own experiences of appraisal conversations. What key elements do you think might form part of the appraisal process?

Intermediate level

- Compare and contrast your experiences with the four domains given in the Good Medical Practice Framework published by the GMC (2012).

Advanced level

- Using the GMC's framework, critically review the supporting evidence you would take with you to an annual appraisal scheduled for next week. What advice would you give yourself for the forthcoming year?

Further reading

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RCoA 2010 Syllabus Key

TM_BK_06 Knows the roles and responsibilities of their clinical and educational supervisors and understands whom to approach locally regarding training issues and concerns.

TM_HK_07 Explains the roles and responsibilities of Clinical and Educational Supervisors and Consultant/SAS trainers.

TM_HK_08 Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment.

TM_HK_15 Outlines the structure of the effective appraisal review.

TM_HK_16 Knows how to raise concerns about a poorly performing trainee.

TM_HK_17 Describes the appropriate local course of action to assist a trainee experiencing difficulty in making progress within their training programme.

TM_HS_18 Conducts developmental conversations as appropriate e.g.: appraisal, supervision, mentoring.

TM_HS_19 Maintains honesty and objectivity during appraisal and assessment.

TM_HS_20 Provides appropriate career support, or refers trainee to an alternative effective source of career information.

TM_HS_21 Recognises the trainee in difficulty and takes appropriate action including, where relevant, referral to other services.

Given below are the 2010 Curriculum competencies relevant to each article in the AaE education series:

THE EDUCATIONAL LANDSCAPE

TM_IK_09 Explains the roles and responsibilities of educational agencies involved in postgraduate medical education.

TM_HK_01 Understands the formal responsibilities of clinical trainers.

TM_HK_07 Explains the roles and responsibilities of Clinical and Educational Supervisors and Consultant/SAS trainers.

TM_HK_13 Explains the roles and responsibilities of educational agencies involved in educational commissioning and governance including, but not exclusively: the GMC, the DoH, Deaneries, Colleges and NHS Education Commissioners.

CREATING A POSITIVE LEARNING ENVIRONMENT

TM_BK_05 Understands their preferred approach to their own learning.

TM_BS_09 Keeps a reflective portfolio of learning and clinical practice.

TM_BS_10 Appropriately solicits and receives feedback from others regarding their own clinical knowledge, skills and behaviour.

TM_IK_01 Knows how to design and implement a personal learning plan for an educational activity related to their own learning.

TM_IK_02 Understands the importance of demonstrating respect for learners.

TM_IK_05 Understands which teaching method to select for effective learning in a variety of situations.

TM_IS_02 Creates good opportunistic clinical learning opportunities for others.

TM_IS_08 Performs a self-critical review of his or her own educational practice (workplace based teaching, tutorials, simulation training or lectures).

TM_HK_04 Understands how to use a wide range of educational methods to provide effective clinical learning opportunities, such as: opportunistic workplace-based training, lectures, part- and whole-task simulator training, full immersion high fidelity simulation, audio-visual feedback and behavioural debriefing.

TM_HK_08 Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment.

TM_HK_11 Explains the importance of their own behaviour as a role model for more junior trainees.

TM_HS_02 Creates good learning opportunities to deliver the curriculum.

TM_HS_03 Shows consideration for learners including their emotional, physical and psychological well being with their development needs; acts to endure equality of opportunity for students, trainees, staff and professional colleagues.

TM_HS_04 Identifies the learning needs of trainees.

TM_HS_11 Is able to lead departmental teaching programmes including journal clubs.

TM_HS_12 Encourages discussions with colleagues in clinical settings to share knowledge and understanding.

TM_HS_16 Receives feedback appropriately for the purpose of self-improvement.

TM_HS_18 Conducts developmental conversations as appropriate e.g. appraisal, supervision, mentoring.

TM_HS_23 Show willingness to take up formal training as a trainer and responds to feedback obtained after teaching sessions.

TM_HS_24 Demonstrates a willingness to advance own educational capability through continuous learning.

TM_HS_25 Acts to enhance and improve educational provision through evaluation of own practice.

SMALL GROUP TEACHING

TM_IS_01 Participates actively in departmental education and learning and records their participation in their reflective portfolio.

TM_IS_03 Plans and conducts a teaching session e.g. lectures, workshop, tutorial, and seeks written feedback on their performance from participants.

TM_HK_05 Understands the educational principles underlying the preparation of effective lessons and presentations.

TM_HS_05 Demonstrates effective lecture, presentation, small group and bed-side teaching sessions.

TM_HS_11 Is able to lead departmental teaching programmes including journal clubs.

TM_HS_17 Assesses the quality of teaching both classroom and workplace-based and records this in their reflective portfolio.

LARGE GROUP TEACHING

TM_BS_06 Delivers a lecture or audio-visual presentation using appropriate multimedia devices & techniques.

TM_BS_07 Obtains feedback on presentations and tutorials they have delivered [in written format].

TM_IS_03 Plans and conducts a teaching session e.g. lectures workshop, tutorial, and seeks written feedback on their performance from participants.

TM_HK_05 Understands the educational principles underlying the preparation of effective lessons and presentations.

TM_HS_05 Demonstrates effective lecture, presentation, small group and bedside teaching sessions.

TM_HS_06 Makes appropriate use of teaching aids and visuals to enhance formal teaching.

TM_HS_11 Is able to lead departmental teaching programmes, including journal clubs.

TEACHING AND LEARNING IN THE WORKPLACE

TM_BK_07 Describes the difference between learning objectives and outcomes.

TM_BS_08 Delivers informal teaching in the workplace.

TM_BS_11 Demonstrates an ability to reflect and analyse constructive feedback from others regarding their own clinical knowledge, skills and behaviour.

TM_BS_12 Engages in opportunistic workplace-based learning and teaching.

TM_IK_03 Knows how to create a framework in which to teach a practical skill safely.

TM_IS_04 Provides appropriate clinical supervision to less experienced colleagues.

TM_HK_03 Knows how to plan a 'teaching list' for a more junior trainee.

TM_HK_14 Knows how to provide a level of clinical supervision appropriate to the competence and experience of the trainee.

TM_HS_05 Demonstrates effective lecture, presentation, small group and bedside teaching sessions.

TM_HS_07 Engages in opportunistic teaching of more junior trainees in clinical settings.

TM_HS_10 Supervises junior trainees in the course of routine and emergency.

ASSESSMENT AND FEEDBACK

TM_BK_04 Knows the process and purpose of workplace-based assessment

TM_BS_04 Demonstrates self-critical review of their own clinical practice in the context of workplace-based assessments such as Multi-Source Feedback

TM_IK_06 Knows how to give and receive effective feedback

TM_IK_07 Knows how to perform WPBA for foundation and less experienced anaesthetic trainees

TM_IS_05 Appropriately performs workplace-based assessments for foundation trainees

TM_IS_07 Gives and receives effective feedback

TM_HK_06 Describes the assessment strategy employed by the RCoA in the context of their own learning and the learning of others

TM_HK_08 Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment

TM_HK_09 Understands the role of, and the appropriate conduct of, the workplace-based assessments

TM_HK_10 Understands the importance of providing timely, specific, non-judgemental and developmental feedback

TM_HS_13 Accurately and reliably uses the workplace-based assessment tools

TM_HS_14 Shows willingness to participate in workplace-based assessments and demonstrates a clear understanding of their purpose

TM_HS_15 Gives appropriate feedback for the purpose of training clinical professionals

TM_HS_16 Receives feedback appropriately for the purpose of self-improvement

TM_HS_17 Assesses the quality of teaching both classroom and workplace-based and records this in their reflective portfolio

TM_HS_19 Maintains honesty and objectivity during appraisal and assessment

DEVELOPING PROFESSIONAL BEHAVIOUR AND A LEARNING CULTURE

TM_BK_01 Knows that patient safety is paramount in all aspects of medical education.

TM_BK_02 Knows their roles and responsibilities as a trainee in the context of clinical governance and patient safety.

TM_BK_08 Knows how to engage in e-learning.

TM_BS_02 Seeks appropriate levels of supervision for themselves when undertaking activities in which they are not fully competent.

TM_BS_03 Demonstrates safe practice in patient management when teaching and supervising others.

TM_BS_09 Keeps a reflective portfolio of learning and clinical practice.

TM_BS_10 Appropriately solicits and receives feedback from others regarding their own clinical knowledge, skills and behaviour.

TM_BS_11 Demonstrates the ability to reflect and analyse constructive feedback from others regarding their own clinical knowledge, skills and behaviour.

TM_BS_13 In discharging educational duties acts to maintain the dignity and safety of patients at all times.

TM_BS_14 Demonstrates how to use information technology to keep up-to-date.

TM_BS_16 Uses on line e-assessment tools.

TM_IK_01 Knows how to design and implement a personal learning plan for an

educational activity related to their own learning.

TM_IK_04 Knows that personal and team performance is affected by non-technical skills and knowledge.

TM_IK_08 Knows the value of inter-professional learning in their own development and in the development other professional roles.

TM_IK_10 Lists the basic concepts and role of human factors and team-based training including crisis resource management in ensuring patient safety.

TM_IK_11 Knows the value of inter-professional learning.

TM_IS_06 Engages with and contributes to inter-professional learning opportunities.

TM_IS_08 Performs self-critical reviews of their own educational practice (workplace based teaching, tutorials, simulation training or lectures).

TM_IS_09 Participates in human factors and patient safety training.

TM_HK_02 Knows the importance of always ensuring safe supervision of learners and takes wide responsibility for this including checking the safety of any teaching being undertaken by trainee anaesthetists within their clinical arena.

TM_HK_04 Understands how to use a wide range of educational methods to provide effective clinical learning opportunities, such as: opportunistic workplace-based training, lectures, part- and whole-task simulator training, full immersion high fidelity simulation, audio-visual feedback and behavioural debriefing.

TM_HK_11 Explains the importance of their own behaviour as a role model for more junior trainees.

TM_HK_12 Recognises the importance of personal development as a role model to guide trainees in aspects of good professional behaviour.

TM_HK_14 Knows how to provide a level of clinical supervision appropriate to the competence and experience of the trainee.

TM_HS_01 Teaches trainees and others in a variety of settings to maximise knowledge, effective communication and practical skills; and to improve patient care.

TM_HS_03 Shows consideration for learners including their emotional, physical and psychological well being with their development needs; acts to endure equality of opportunity for students, trainees, staff and professional colleagues.

TM_HS_08 Engages in simulator-based learning.

TM_HS_09 Assists in simulator-based teaching.

TM_HS_17 Assesses the quality of teaching both classroom and workplace-based and records this in their reflective portfolio.

TM_HS_19 Maintains honesty and objectivity during appraisal and assessment.

TM_HS_20 Provides appropriate career support, or refers trainee to an alternative effective source of career information.

TM_HS_22 Participates in strategies aimed at improving patient education e.g. talking at support group meetings.

TM_HS_24 Demonstrates a willingness to advance own educational capability through continuous learning.

TM_HS_26 Balances the needs of service delivery with education.

TM_HS_25 Acts to enhance and improve educational provision through evaluation of own practice.

EDUCATIONAL SUPERVISION

TM_BK_06 Knows the roles and responsibilities of their Clinical and Educational Supervisors and understands whom to approach locally regarding training issues and concerns.

TM_HK_07 Explains the roles and responsibilities of Clinical and Educational Supervisors and Consultant/SAS trainers.

TM_HK_08 Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment.

TM_HK_14 Knows how to provide a level of Clinical supervision appropriate to the competence and experience of the trainee.

TM_HS_18 Conduct developmental conversations as appropriate e.g. appraisal, supervision, mentoring.

TM_HS_20 Provide appropriate career support, or refers trainee to an alternative effective source of career information.

APPRAISAL

TM_BK_06 Knows the roles and responsibilities of their clinical and educational supervisors and understands whom to approach locally regarding training issues and concerns.

TM_HK_07 Explains the roles and responsibilities of Clinical and Educational Supervisors and Consultant/SAS trainers.

TM_HK_08 Understands the importance of assessing and evaluating learning and is able to distinguish between formative and summative assessment.

TM_HK_15 Outlines the structure of the effective appraisal review.

TM_HK_16 Knows how to raise concerns about a poorly performing trainee.

TM_HK_17 Describes the appropriate local course of action to assist a trainee experiencing difficulty in making progress within their training programme.

TM_HS_18 Conducts developmental conversations as appropriate e.g.: appraisal, supervision, mentoring.

TM_HS_19 Maintains honesty and objectivity during appraisal and assessment.

TM_HS_20 Provides appropriate career support, or refers trainee to an alternative effective source of career information.

TM_HS_21 Recognises the trainee in difficulty and takes appropriate action including, where relevant, referral to other services.