Liberating Learning

The Report of the Conference of Postgraduate Medical Deans' ad hoc Working Group on the Educational Implications of the European Union Working Time Directive and the subsequent European Working Time Regulations: November 2002 (revised 2009).

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1. Aims

The original Working Group aimed to:

- articulate and define an approach to apprenticeship learning in the clinical environment;
- develop practical guidelines to enable learners and trainers to modernise their approaches to clinical education;
- consider the impact of the European Working Time Regulations (EWTR) on postgraduate medical education and training of doctors and dentists within these contexts; and
- support and encourage multi-professional learning.

Liberating Learning was first published in 2002. Despite wide publicity and critical welcome it remains relatively unknown and underused. In October 2009 in the light of the changes brought about by Modernising Medical Careers (Foundation Training in 2005 and Specialty Training in 2007) and the European Working Time Regulations (EWTR), which were fully implemented in August 2009, a small working group convened to review and update this document. Revision has mainly concentrated on updating terminology and correcting errors.

The concepts behind this document are still pertinent. Indeed Liberating Learning could be considered even more relevant given the new working patterns for both learners and trainers in the modern NHS.

This updated document is therefore a practice guide, which will assist the planning and delivery of medical education, while making a contribution to the quality of that education.

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1 How can this document help?

This document has been developed to help identify practical learning strategies that can be used within the clinical learning environment, recognising that this will increasingly have to take place over the whole of the 24 hours of the working day during which patient care is provided.

The document has been designed in three parts.

Part 1 -- Introduction

This introduction sets the context of learning within the planned implementation of the EWTD. It emphasises the need to develop a learning environment for postgraduate medical education to become more learner and clinically focussed. It will be more difficult to provide the opportunities for large group teaching activities if trainees are working shifts. Trainers will need to continually optimise the potential to structure learning within clinical settings; learners will need to recognise that at almost every point during the working day there are learning opportunities to be exploited and will need to be flexible to realise these opportunities.

Part 2 - Learning strategies – a matrix

The second part is composed of a matrix that identifies a wide range of learning strategies that can be used to help trainers maximise the time and opportunities that are available. The matrix identifies learning strategies that may be appropriate for different clinical settings.

How should this matrix be used? The matrix identifies a range of learning strategies and the different clinical settings where they may be most useful. The matrix:

- should be available to learners and trainers;
- will enable trainer and learner to adapt the learning opportunity to suit the learning styles of the individual;
- should be part of the objective setting process between trainers and learners;
- will help trainers to maximise the time and opportunities for learning; and
- will help in the planning of innovative and creative learning in the clinical environment;
- ultimately will make a contribution to the delivery of quality care for patients.

Part 3 - Learning strategies –an individual practical guide

Part three describes the learning strategies from the matrix which are listed alphabetically. Each is described in standard format, including strengths and weaknesses.

The matrix and the guide should be used together to:

- remind trainees (and trainers) regularly that every clinical meeting, exchange, or encounter is a learning opportunity;

- help to create the learning environment by explicitly reinforcing and summarising what has been learned whenever there has been an opportunity.

Consider, for example, whether the time-honoured presumption that a business ward round cannot/does not involve teaching is correct. Should the ward round leader differentiate between a business round and a teaching round and bypass any learning which can be found on a business ward round? After consulting the matrix and the individual practical guide appropriate learning strategies can be introduced. If the "lessons" of the business round are succinctly drawn out at the end of the round does this then become a teaching round? What is the difference between a business round and a teaching round? Perhaps only the name….

1. Service Context

Working within the NHS

The NHS Plan and the NHS Constitution expect doctors and other healthcare professionals to provide continually improving care for patients. Modernising their education is at the heart of improving the health service.

Doctors within the service continue to provide excellent care for patients within a context of rising expectation and need. Education takes place within this environment. We need to identify the means by which learning can adapt to the challenges facing the NHS.

Working within Europe

The European Working Time Regulations (EWTR) require a 48-hour limit to the average number of hours worked every week. Doctors are required to have a minimum rest period of 11 hours in every 24 hours. The SIMAP judgement requires that doctors who are resident on call be deemed to be working even if they are asleep. Consequently, most junior doctors are now working in shift patterns rather than "traditional" on-call rotas. In 2009, fewer than 3% of rotas were allowed to be derogated from the EWTD: most of these will be brought under EWTR in the next 2 years.

1. Educational Context

Modernising Medical Careers and the current shape of PGME

Modernising Medical Careers (MMC) has introduced a 2-year structured Foundation Training programme (since 2005) and 57 specialty or sub-specialty training programmes (since 2007). Structured training introduced fundamental changes into PGME. The Royal Colleges define the minimum duration of specialty training and set curricula for each specialty. These curricula then have to be approved by the competent authority, the Postgraduate Medical Training and Education Board (PMETB) which is soon to merge with the General Medical Council (GMC). Each curriculum leads towards a Certificate of Completed Training (CCT) and contains an assessment strategy for making progress towards achieving this CCT. After the Royal Colleges' proposed curricula are approved by PMETB, the Postgraduate Deans are responsible for implementing them and monitoring trainees' progress.

Problems with recruitment to the MMC programmes were subsequently investigated by Sir John Tooke. The Tooke report recommended a way forward which also informed the strategy for the development of quality medical education. The report emphasised the positive aspects of MMC – closer trainee supervision, workplace-based assessments, portfolios, etc. It is the educational implications of Modernising Medical Careers, confirmed by the Tooke report, which make Liberating Learning a particularly relevant document.

Modernising Medical Careers and EWTR

We now have a new European agenda – the EWTR. The EWTR impact on all grades of doctors in training. Most doctors' rotas already comply with the changes to working practice which is required and medical education has reflected this. Changes to the way in which doctors work, learn and are assessed have been implemented as part of Modernising Medical Careers. This has altered the landscape of Postgraduate Medical Education (PGME) since 2004.
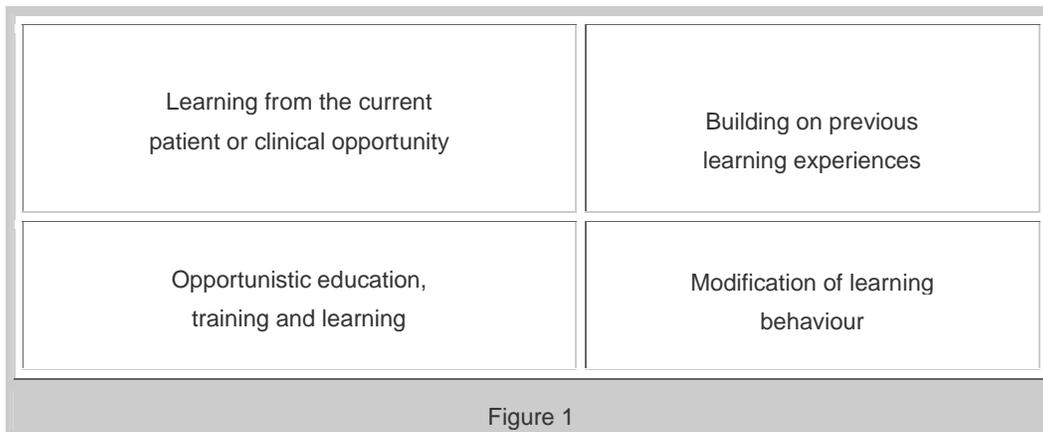
In accepting our obligation to meet the terms of the EWTR a new look at postgraduate medical education is required. It needs to be both modernised to meet the needs of the NHS and the increasing emphasis on patient-centred care and liberated to encourage learning. Such learning is placed within a multi-professional context, supports a robust appraisal and assessment process, and is properly

resourced. This latter includes a proper recognition and acknowledgement of those who train the next generation. However, this does not imply passive learning. There needs to be a shared responsibility for learning which is jointly owned by the trainer and the learner and a shift from training to learning. A new model of learning, shown below, should be encouraged and shared across postgraduate medical education.

The new consultant contract and the development of appraisal with job plan reviews offer a real opportunity for trainers to specify the time required for them to meet their educational responsibilities. This is now the subject of a recommendation by the Academy of Medical Royal Colleges (AoMRC), the Postgraduate Medical Education and Training Board (PMETB) and the Conference of Postgraduate Medical Deans (CoPMeD)..

A new paradigm for learning

Just as there has been an enduring model for the exceptional potential of every contact a patient has with a general practitioner, and with any other health professional (Stott NCH, Davis RH. The exceptional potential in each primary care consultation. JRCGP 1979;29:201-5.), so there is a similar potential for every contact between a trainer and trainee (Figure 1).

Learning from the current patient or clinical opportunity	Building on previous learning experiences
Opportunistic education, training and learning	Modification of learning behaviour

Figure 1

There is always an opportunity for teaching on almost any aspect of a clinical encounter, be it in the consulting room, at the bedside or elsewhere in a clinic or operating theatre. This can be lengthy or brief, and may embrace clinical, scientific, psychological, social, ethical or any other domain of medicine.

Equally, there is the potential to use the opportunity to build on previous learning, from the perspective of attitude, knowledge or skill.

Any such trainer/trainee contact offers an opportunity for learning. This may be about something in the trainee's (or the trainer's) mind at that moment; some related aspect or topic; or something previously

agreed to be explored when an opportunity presented. The only constraint is the limitation of imagination.

Just as contacts with patients may present an opportunity to modify the way they seek or use health care or services to their better advantage in the future, so contacts between trainees and trainers can present an opportunity for the learning approach, strategy or source to be modified to the future benefit of the learner. For example, redirection to an appropriate source (e.g. the Internet, or an e-learning resource) may be appropriate, as might a suggestion to go and see some other colleague.

It is our thesis that these potential opportunities always exist; it is up to the learner and the trainer to seize them. There may be constraints, such as the lack of time, which prevent their being used. However, these exceptional opportunities should only be lost consciously not unwittingly.

Conclusions

The working party reached several general conclusions. A learning environment, in which PGME will become more learner-focussed and clinically based should be created. Learners should learn actively rather than be treated as 'passive' trainees. There should be recognition and exploitation of opportunities to learn during the working day or night. Trainers should maximise the potential for structured learning within clinical settings, and regularly emphasise that every clinical meeting, exchange or encounter is a learning opportunity. Trainers should also reinforce and summarise what has been learned. Even though learners will remain in charge of their learning, trainers will need to help in developing their skills and widening their repertoire of educational strategies. Learners will also need to record such learning opportunities more comprehensively in order to provide evidence of learning.

In summary, this document seeks to promote learning in the context of a modern NHS that includes conforming with the requirements of the EWTR. The Working Group have identified practical learning strategies that can be used within the clinical learning environment, throughout the working day and night, seven days a week. We have dealt only with the educational aspects and do not attempt to describe service changes that may also be required. The document is intended to be comprehensive not exhaustive.

A Learning Strategy Matrix

Introduction

The introduction of shift patterns has radically altered the opportunities for teaching and learning through face-to-face contact. The challenge to 'teachers' will be to identify what can be achieved through relatively independent learning by the trainees, and secondly, how to optimise the sometimes limited contact there is with trainees to ensure quality time. For the former, trainers should identify learner-based strategies (focus 3 in the matrix) that are appropriate for some of the desired learning outcomes for each trainee. In order to maximise the potential of other teaching and learning opportunities, trainers should consider the variety of teaching strategies available to them in different clinical situations (focus 1 and focus 2 in the matrix). In these new approaches, the value of peer and team interaction and support should not be overlooked. For example, shift arrangements should involve whole teams wherever possible. The list is not exhaustive and creativity is to be encouraged.

2. A Learning Strategy Matrix

Focus	Situation	Learning Strategy
Patient Based Patient Present	**Ward Round** • Business/daily Ward round • Formal ward round Multi-professional opportunities	• Bedside Teaching • Discussion • Question/answer • Demonstration • Opportunistic / Experiential teaching • Shadowing • Teaching others • Peer learning • e-learning (where available)
	Topic-based bedside teaching	• Structured Observation • Discussion • Question / answer • Experiential • Problem-based learning • Learning from patients • Team teaching • One to one teaching / coaching / supervision • Teaching others • Peer learning
	Outpatient Clinic	• Structured Observation • Opportunistic teaching • Question/answer • Demonstration • 1-1 teaching / coaching • Discussion • Experiential • Shadowing • Video with reflective analysis • Problem based learning

Special units

e.g. endoscopy

Multi-professional
opportunities

- Demonstration
- Structured Observation
- Experiential
- Shadowing
- Question/answer
- Problem based learning
- Team teaching

Theatre

- Demonstration
- Structured Observation
- Experiential
- Shadowing
- Question/answer
- Team teaching

**On-the-job, independent
working**

Opportunistic

- Experiential
- Reflective analysis
- Discussion
  (learning from patients and relatives)

Case Conference

Multi-professional
opportunities

- Case study / case meetings
- Discussion
- Experiential

Patient Based

Patient Not
Present

Handover

Multi-professional
opportunities

- Handover learning prioritisation
- Case study / case meeting
    a. Discussion
    b. Question / answer
    c. Reflective analysis
- One to one

Clinical Reflection

- Case debriefing

X-ray / pathology meeting

- Case study / case meetings
- Discussion
- Question / answer
- Problem-based learning

	CPC / Grand round	- Case study / case meetings
		- Lecture
	Multi-professional	- Discussion
	opportunities	- Question / answer

	Audit Meeting	- Learning from audit
		- Project work
	Multi-professional	- Discussion
	opportunities	- Case study (analysis)
		- Significant incident analysis

	Team / Case meetings	- Case study
		- Case debriefing
	Multi-professional	- Significant Incident analysis
	opportunities	- Discussion
		- Project work

2. Classroom Based	**Formal teaching session**	- Buzz groups
		- Brainstorming
		- Lecture
		- Video conferencing
		- Case study / case meetings
		- Discussion
		- Game / quiz
		- Open/distance/e-learning

| | **Journal Club** | - Lecture / presentation / video conferencin |
| | | - Discussion |

	Training courses	- Ice breakers
	e.g. APLS course	- Workshops
		- Demonstration
		- Simulation
		- Lecture
		- Video conferencing
		- Game / quiz
		- Role Play
		- Open/distance/e-learning

- Brainstorming

3. Learner Based	**Informal away from work**	• Reading book & journals • Open / distance / e- learning • Reflection / analysis • Peer learning • Diary / portfolio
	In-work ad-hoc opportunities	• Question / answer • 1-1 teaching / coaching • Discussion (multi-professional opportunity) • Reading books & journals • E-learning • Diary / portfolio
	Educational 1-1 meetings (e.g. Appraisal/ review meetings)	• Significant Incident analysis • Tutorial • Discussion • Diary / portfolio
	Study Time	• Reading books & journals • Reflective analysis • Open / distance / e-learning • Simulation

3 Learning Strategy Proformas

Strategies can be grouped based on their close links but, for convenience, are arranged alphabetically:

- Bedside teaching

- Brainstorming

- Buzz groups

- Case de-brief

- Case study / case meetings

- Demonstration of clinical skills

- Discussion forum / Web 2.0 media

- Experiential or opportunistic learning

- Ice breaker

- Journal clubs

- Learning at handover

- Learning from patients

- Learning from teaching others

- Learning through clinical audit

- Lectures

- One to one teaching / coaching / supervision

- Open / distance / e-learning

- Peer learning

- Problem based learning

- Project work

- Question and answer

- Reflective analysis of logbooks / diaries / portfolios

- Reflective reading

- Role play

- Shadowing

- Significant incident analysis

- Simulation

- Structured observation

- Team teaching

- Tutorials

- Video analysis / peer observation

- Workshops

3. Learning Strategy Proformas

Learning Activity: Bedside Teaching

Description (What is it)

- Opportunity for either informal (A) or formal (B) teaching at the bedside usually during a ward round.

- Often based on practical competencies including history taking, patient examination, diagnosis, patient management and communication with patients, ward staff and other professionals.

    a. Opportunistic and ad hoc in a post-take or routine business ward round with focus on practice rather than theory

    b. Planned and structured usually involving only a few selected patients for a teaching ward round

How to do it

a. Informal bedside teaching

    o The 'teacher' can teach through role modelling e.g. attitudes, communication skills

    o Demonstration can be used to perfect clinical procedures and technique

    o Encourage trainees to participate according to their level of expertise

    o Trainees can be observed practising their clinical skills and given immediate constructive feedback to facilitate improvement

    o Encourage trainees to ask questions of the more experienced staff present and to involve the patients

    o Give positive and constructive feedback to trainees on symptoms, signs, diagnosis, examination technique

    o Open discussion on evidence-based practice, clinical judgement and decision-making may take place away from the bedside or in de-brief sessions

b. Formal bedside teaching

    o Specific time is designated as teaching time

o The trainee and teacher pre-select patients appropriate to the trainee's learning objectives in their personal learning plan or other identified needs (such as to familiarise trainees with the format of formal assessment such as College clinical examinations)

o Can focus on specific physical signs or diseases and should relate theory to practice

o Can be used to improve identified weaknesses in the trainee's clinical skills or gaps in their knowledge

o A range of teaching strategies can be employed according to the learning objectives e.g. demonstration, question-answer, discussion

o The patient can participate

Tips for success

Learner	Trainer
• Take this vital opportunity to seek early feedback on clinical skills including diagnosis and clinical decisions • Don't be afraid to ask questions if you don't understand or know something • Bedside teaching should be followed up by relevant reading on cases seen and issues raised to maximise learning value • Jot down brief notes or reminders of follow-up activity needed	• (A) can be used to assess diagnosis and decisions of trainees and, for more senior trainees, to assess their communication and clinical judgement in conducting ward rounds • Critical analysis of diagnostic tests should be included in (A) and (B) • Opportunity to involve nurses and other professions in the teaching and • (B) should be well structured and pre-planned so as to maximise time at the bedside. • Discussion can take place away from the bedside such as in de-brief sessions to be considerate to the patients involved

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3. Learning Strategy Proformas

Brainstorming

Description (What is it)

- Brainstorming is a strategy that maximises the ability to generate new ideas relating to a specific area of interest

- It is a part of problem solving which encourages the creation of new ideas by excluding criticism or judgement of individuals' contributions

- Brainstorming works by focusing on a problem, and then deliberately coming up with as many unusual solutions as possible by pushing the ideas to the extreme

- Suggested time: 5 to 20 minutes

How to do it

- Introduce the topic or pose a question

- Ask trainees to take turns sharing ideas and possible answers.

- Encourage all trainees to participate

- Print the main words or phrases of trainees' contributions on a board or flipchart.

- Trainer's ideas may be added

- Acknowledge and praise trainees for their contributions.

Tips for success

Learner	**Trainer**
• Build on ideas put forward by others	• No criticism of ideas
• Suggest unusual ideas	• Encourage diversity
• Go for large quantities of ideas	• Encourage everyone to participate
• Use to increase knowledge and understanding.	• Do a warm up to relax trainees.

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3. Learning Strategy Proformas

Buzz Groups

Description (What is it)

- A method to use within a formal teaching session with a large group

- Large group divided into small groups (maximum 6 people)

- Aim is to promote active participation and involvement of the learners

- Free flow discussion resulting in a general 'buzz' noise from the activity

- Different from 'Discussion' in that the teacher remains absent from the groups

- Suggested time: Variable from 2 or 3 minutes up to 20 minutes.

How to do it

- Use during the main body of a formal teaching session e.g. lecture

- Present groups with a topic or problem to explore issues or to problem solve

- Ask groups to nominate a scribe to summarise outcomes or experiences

- Feedback session, if appropriate, can be verbal or a display of the summaries around the room

- Follow up and expand on the issues that formed the focus of the group activity.

Tips for success

Learner	Trainer
• Contribute but don't monopolise the time	• Look out for groups who might need the task clarifying
• Learn from listening and reflecting	• Once the buzz has started, keep away
• Contentious ideas help if the discussion is floundering	• Ensure the topic / task is relevant to learning objectives / outcomes
• Don't have verbal feedback if there are more than five groups.	• Allow time for summary and ensure agreement of the outcomes.

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3. Learning Strategy Proformas

Case De-Brief

Description (What is it)

- Learning opportunities integral to normal service work

- Discussion of specific issues arising from a clinical episode (Trauma, cardiac arrest, theatre session, outpatient clinic, ward round)

- Can be part of the handover of information about cases.

How to do it

- As little as 10 minutes would be adequate in many debrief situations

- There should be a handover period built into any shift system

- The "teaching clinic" or "teaching list" could be introduced

- An appropriate room is also needed such as the ward office, theatre coffee room or clinic office. X-ray viewing facilities will often be required

- Select appropriate cases during the shift (you may decide that it is clinically useful to present all the acute admissions from the previous shift)

- Preparation should involve the collection of patient's notes and x-rays

- One person should present the case with relevant x-rays, investigation results and management to date

- There is then opportunity for discussion of interesting/challenging points:

    o   Why certain decisions were taken

    o   How the case could have been handled differently

    o   The future management plan

- Give feedback and guidance on further self-directed learning.

Tips for success

Learner	Trainer
• Take advantage of the educational opportunities in handover/debrief sessions • Keep your trainer(s) up to date with your objectives • Highlight areas in which you feel you need help • Use the opportunity to seek feedback from your trainer • Read up on topics raised during the session.	• Make time for teaching/discussion • Be aware of trainees objectives from start of post assessment • Be aware of each trainee's weaknesses. • Take the opportunity for positive feedback and providing guidance on further self-directed learning • Revisit areas covered at a later date.

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3. Learning Strategy Proformas

Case Study/Case Meetings (Case Based Discussion)

Description (What is it)

- A range of activities in which the focus is a particular real case

- The case can be chosen at random, because it has presented the trainee with a particular challenge / problem, or because it demonstrates a particular aspect of patient care.

How to do it

- The trainee is usually encouraged to bring the case but the trainer can bring the case if it illustrates a particular issue that the trainer wishes the trainee to consider

- Open with a presentation of the facts of the case

- Follow by an exploration of the issues that the case raises to identify the options open to the clinician and the factors that might affect the selection of which option to take

- Discussions can take place between a trainer and an individual trainee, or within a group of trainees facilitated by the trainer

- Can take place in an informal setting (e.g. during or at the end of a ward round or clinic) or in a more formal setting (e.g. in a teaching session planned to consider a particular clinical issue).

- As Case based Discussion (CBD) is often a component of Workplace Based Assessment it is useful to ensure that records of the discussion are kept and referenced to the comptetences of the curriculum being studied.

Tips for success

Learner	Trainer
• Be prepared to identify cases that have caused you particular problems • Try to identify the important points of the case for you • Be prepared to consider the options and come to a reasoned conclusion.	• Give the trainee first chance to identify the relevant issues, management options and their preferred option • Help the trainee identify what are the most important issues and keep the focus on these • Help the trainee consider the pros and cons of the options and encourage them to reach a decision based on an analysis of these • Avoid getting drawn into irrelevant minutiae • Be honest - avoid colluding with a trainee who won't come to a decision or comes to a decision that is patently flawed.

3. Learning Strategy Proformas

Demonstration of Clinical Skills (Direct Observation of Procedural Skills)

Description (What is it)

- Showing by demonstration how to perform a clinical skill either as an introduction to a new skill or to rectify/improve faults shown in the learner's attempts

- The skills can be either craft skills e.g. a surgical procedure, or generic skills, e.g. history taking

- An educational opportunity which can be in a simulated setting where such resources are available or in the clinical setting.

How to do it

- Prepare by deconstructing the skill to into bite-sized steps

- Explain the purpose and importance of the skill - can relate theory to practice

- Can be 1-1 or group based

- Ensure all learners can see clearly before you start the demonstration

- Ask questions from time to time to check on understanding and clarity of demonstration

- Follow as soon as possible by supervised learner practice and feedback

- Useful to video both demonstration and learner practice to enable review at a later date

- Demonstration can be provided through video or other electronic medium but may require strategy for electronic support and updating

- Expert supervision is essential

- As Direct Observation of Procedural Skills (DOPS) is often a component of Workplace Based Assessment it is useful to ensure that records of the discussion are kept and referenced to the comptetences of the curriculum being studied.

Tips for success

Learner	Trainer
• Can choose time / place for self-directed electronic learning	• Can demonstrate in normal course of clinical work <
• Keep a record of skills learnt to a satisfactory level	• Can monitor practice of learner during normal ward rounds, etc
• Practise as often as possible, particularly in the early stages of learning a new skill	• Give feedback and correct in the early stages of learning to prevent bad habits forming
• Don't be afraid to ask questions or for a repeat demonstration if still unclear.	• Use clinical opportunities after simulated learning episodes.

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3. Learning Strategy Proformas

Discussion forum / Web 2.0 media

Description (What is it)

- Internet or Intranet based medium for peers or learners and trainers to discuss issues

- May include interactive communities such as social networking sites.

How to do it

- Use focussed topics to enable discussions.

- Ensure that all relevant learners and/ or educators are invited

- Engage the help of an experienced facilitator and moderator

- Only use forums sanctioned by your training programme for such matters

- Ensure that they meet NHS IT security standards

- Ensure that only appropriate individuals are accepted as participants/ friends

- Remember that confidentiality must be maintained at all times and that it is easy to inadvertently reveal information that is confidential to a patient, colleague or an institution.

Tips for success

Learner	Trainer
• Can choose time / place for self-directed forum discussion • Keep a record of discussions • Try to help your peers explore their experiences rather than simply offer a solution • Don't be afraid to ask questions	• Can also participate in the discussions • Can learn of learner difficulties or concerns that may not be apparent otherwise • Give feedback and correct errors in the advice other learners have given – this will help both parties

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3. Learning Strategy Proformas

Experiential or Opportunistic Learning

Description (What is it)

- Independent learning through normal routine work experiences

- Learning by doing, observing, reflection

- Related to personal learning plans

- Guidance is provided by means of a learning framework (learning objectives, competences)

- Supported by formal and informal interactions with more experienced staff (multi-professional).

Opportunistic learning is similar to experiential learning, but is more ad hoc and not necessarily related to personal learning plans.

How to do it

- The Educational Supervisor ensures the trainee has a framework for learning - Personal Learning Plan, Learning objectives, list of competences

- The trainee carries out his / her normal duties

- During the course of the working time or afterwards, the trainee analyses and reflects on experiences, looking for patterns, new knowledge and identifying ways of improving skills

- For experiential learning, concentrate on weakest areas or gaps in knowledge and skills

- The trainee discusses their new learning with senior staff, including nurses or other relevant professionals.

Tips for success

Learner	Trainer
• Do not generalise from limited experiences	• Never presume the trainee will learn through their experiences
• Always check on validity of assumptions, conclusions formed	• Monitor and assess the learning frequently
• Remain alert and receptive	• Provide both positive and constructive feedback
• The medical day is often unpredictable, but learning from it needs to be organised	• Explain how you go about learning opportunistically
• Scan, Select, Spot, Succeed, Suggest.	• Encourage the trainees to describe what they have learnt opportunistically.

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3. Learning Strategy Proformas

Ice Breaker

Description (What is it)

An activity to get people who may not know each other communicating and feeling comfortable with each other. It is particularly useful at a first meeting/tutorial/discussion group. It requires a skilled facilitator to ensure that all are involved and are not intimidated and can enjoy the activity.

How to do it

- Ensure the size of each group is not too big (a maximum of about six), can be used with pairs.

- Explain what is about to happen

- Start with introductions (how the facilitator introduces his or herself) is crucial

- Choose an activity lasting about 10 minutes in which the group members have to talk to other members of the group

- Try and find an activity that relates to the purpose of the rest of the session - this helps if you have reticent members or if time is limited

- An example: in pairs, tell each other three things about your work that you are proud of

- After five minutes, each person then has to introduce their partner to the rest of the group based on what they have learnt about them.

Tips for success

Learner	Trainer
• Be prepared to get involved and have some fun	• Be clear about what you are about to ask the group to do
• Help colleagues (some are more shy than others)	• Be prepared to be involved. Have fun and enjoy it.
• Be flexible	• Ensure all members of the group are involved
• Understand that the icebreaker may not always be directly relevant but developing relationships quickly will be of benefit in the future.	• Be interested in trainees as individuals

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3. Learning Strategy Proformas

Journal Clubs

Description (What is it)

A regular departmental meeting devoted entirely to presentation and critical analysis of recent scientific literature relevant to the department and its trainees

How to do it

- Clinical Director or College Tutor appoints a co-ordinator, usually a more senior StR

- Journals (general medical and specialist) are allotted to members of the team (consultants, StRs, Foundation doctors and other professionals)

- Time is set aside, usually one hour weekly or fortnightly, for topical items to be presented for the information of, and critical analysis by, the group

- Group members have library or on-line access to headline journals in the specialty, plus BMJ, NEJM, Lancet

- Time, room and catering are arranged on a regular basis. Doing this occasionally does not work

- There should be a clear theme/aim for each session including reaching a conclusion and consideration of implications for clinical practice

- No more than four articles can usually be discussed in a 1-hour session

- Trainees who present are given early feedback on their presentation and critical analysis skills

- Subjects can be linked to current patients of interest

Tips for success

Learner	Trainer
• Excellent non-threatening opportunity to hone presentation skills and develop critical analysis performance as well as learning the subject matter itself.	• Opportunity for informal assessment and useful feedback • Opportunity for group bonding • Useful for continuing professional development, sharing useful information • Introduce a structured approach (see references, e.g. Greenhalgh)

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3. Learning Strategy Proformas

Handover

Description (What is it)

- Learning from the handover of clinical information to other doctors

- Learning by doing, observing, interaction, reflection

- Guidance can be provided by means of a structured template for the handover process

- Supported by formal and informal interactions with more experienced staff (multi-professional)

- The EWTD implies shift working in the busiest acute specialties. Handovers have become more frequent and an essential part of patient care and patient safety.

How to do it

- The trainee summarises his / her case reports at the time of handover of clinical information about patients, tasks to complete and duties for the next shift

- During the course of the handover or afterwards, the trainer assists trainee(s) to analyse and reflect on handover content

- There should be a brief time for reflection at the end of each handover

- Foci for learning include:

  - Clear, unambiguous communication

  - Conciseness of presentation

  - Completeness of problem list

  - Accuracy of problem list

  - Prioritisation of problems

  - Continuity of care

  - Delegation of tasks

  - Team working and individual responsibilities**.**

Tips for success

Learner	**Trainer**
• Use written details for handover	• For maximum efficacy, handovers are best conducted in the context of an educational environment
• Rehearse handover details beforehand	
• Select the facts you believe clinically important	• Never presume the trainee will learn through their experiences
• Solicit feedback on your selection and presentation	• Attend handovers: they are an important learning resource and assist continuity of care.
• Compare feedback with your original details	• Restrict time used
• Keep anonymised notes on important patients, linked to notes on their condition	• Provide positive and constructive feedback
• Keep notes of lessons learned e.g. in a reflective diary	

3. Learning Strategy Proformas

Learning from Patients

Description (What is it)

- Learning through normal routine work experiences

- Learning by interaction with patients

- Learning by doing, observing, reflection

- Supported by formal and informal interactions with more experienced staff (multi-professional).

How to do it

- The trainee carries out his/her normal duties

- During the course of interactions with patients, the trainee should seek to learn facts or skills from patients or feedback signs of their communication skills

- Trainees should solicit information from patients

- Trainees reflect on experiences, looking for new knowledge and ways of improving skills

- Note the learning points in a book or personal digital assistant (PDA) to be carried at all times (N.B. ensure anonymised patient information)

- Salient lessons learnt can be noted in a portfolio of education

- The trainee discusses their new learning with senior staff, including nurses or other relevant professionals.

Tips for success

Learner	Trainer
• Listen to patients/relatives: all clinical lessons are learnt from them	• Never presume the trainee will learn through their experiences
• Ignore what patients tell you at your peril! Regard each patient as an expert, or potential expert, on their illness - many patients with diseases research their disease	• Monitor and assess the learning frequently
• Lessons gleaned from patients should be corroborated by reflective reading	• Issues of patient autonomy, consent, confidentiality and ethics may need discussion.
• Plan what you want to learn from patients before clinics, etc	
• Review your notes and notebooks every week.	

3. Learning Strategy Proformas

Learning from Teaching Others

Description (What is it)

- Learning by teaching undergraduates, postgraduates, peers or others
- Many teachers acknowledge that they learn a great deal when they prepare for and teach others
- To teach a specific topic, a teacher will research around the topic to cover more than will be taught, and thus take their own knowledge further.

How to do it

- All doctors have a role in teaching
- Consultants can help trainees develop their teaching skills by setting specific teaching tasks on the ward round or in other clinical settings
- Consultants should negotiate with the trainee to identify a focus for teaching. This focus should benefit the learner while also being an area to be developed by the trainee
- Teaching patients is as valuable as teaching other professionals
- Best used in specific teaching ward rounds to allow for in depth preparation beforehand.
- Trainee prepares to teach a 'learner' by researching the topic
- The trainer should act as mentor and give advice on the planning
- Trainee should seek feedback from the 'learner'. A de-brief session should be held between trainee and mentor.

Tips for success

Learner	Trainer
• Research the topic fully to feel confident with what you are going to teach • Check on understanding from time to time during the teaching • Reflect on what you have learned.	• The choice of topic and help with preparation are vitally important • You don't have to be present at all teaching sessions but must have debrief regularly.

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3. Learning Strategy Proformas

Learning through Clinical Audit

Description (What is it)

Using clinical audit to:

- Continuously learn about and improve clinical practice

- Learn about project management

- Learn about multi-professional working relationships

- Learn about specific aspects of a specialty

- Place it within the context of clinical governance.

How to do it

- Needs time and preparation

- Meet with learner to agree objectives of audit

- Agree with learner who else needs to participate in audit

- Agree timescale of audit

- Agree resources and support needed

- Review progress of audit regularly

- Agree how findings of audit will be presented.

Tips for success

Learner	Trainer
• Can be done in flexible time	• Allows audit of clinical activity for specialty
• Supports work with other professionals	• Encourages 1:1 learning
• Allows learning about project work	• Encourages independence of learner
• Places audit within context of clinical governance	• Allows context of clinical governance to be explored
• Enhancement of CV	• Can potentially identify change to benefit patient care
• Preparation for relicensure	• Learning does not have to be done "09:00 - 17:00".
• Can enhance patient care by modifying clinical practice.	

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3. Learning Strategy Proformas

Lectures

Description (What is it)

- As a learning strategy, a lecture is where a teacher talks to one or more learners with little two-way interaction
- Often, a teacher will lecture to a large group in a formal teaching room
- Useful for passing on of information by an expert or well informed lecturer
- Most effective for learning when incorporated with other teaching strategies which involve audience participation
- Audience may take notes or be given "hand outs" or lecture materials be made available on an electronic platform e.g. Intranet, Internet or "Blackboard"

How to do it

- Preparation is vital (what do the audience need to know or learn?)
- Delivery is important (engage audience, stimulate interest, vary the stimulus)
- Structure the lecture (introduction, body, summary)
- Check any equipment at least 20 minutes prior to the start
- Prepare the room (familiarise yourself with light, microphone, etc,)
- Ensure seating is correctly arranged and any visual aids are visible from all areas
- Lecture must be relevant to the audience and at an appropriate level to be challenging but not too complex
- Use variety to break up the talking: video, OHP, paired discussion
- Choose a good lecturer with a good speaking voice and presentation skills!

Tips for success

Learner	Trainer
• Turn up on time - but above all, turn up!	• Allow time for preparation and check all materials and equipment
• Ensure you have protected time	• Strive for audience engagement/ participation
• Identify key messages	• Summarise before asking for questions
• Ask questions if appropriate	• NEVER have to say "You won't see this because it's small. But ….."
• Listen and use handouts	• If you speak with a monotone, seek help - it can be improved.
• "What did I learn from that"? Follow up with further reading and/or discussion with seniors and peers.	

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3. Learning Strategy Proformas

One to One Teaching/Coaching/Supervision

Description (What is it)

- A range of activities in which the crucial factor is the one-to-one interaction between a single trainer and a single trainee

- These typically continue over a period of time

- These usually take place on a face-to-face basis but interaction at a distance is also possible (see for example entry on "e-mail" teaching)

- Their greatest strength is the close individual relationship, their flexibility and the opportunity provided to meet the particular needs of an individual trainee.

How to do it

- Can be either planned or informal and can take place in a wide range of settings - for example, during or at the end of a clinic, ward round or theatre session as well as within a formal teaching session

- Each episode is used to focus on a particular piece of knowledge, a skill or an attitudinal issue with the trainer helping the individual trainee to develop

- It is important for the trainer and trainee to negotiate the subject matter for the teaching

- Ideally the trainer should aim to tailor the exact approach of the teaching to the style of the trainee.

Tips for success

Learner	**Trainer**
• Be prepared to negotiate and agree topics with your trainer - don't forget your personal development plan	• The relationship must work – you need to respect the trainee
• The relationship with your trainer needs to last - be prepared to work on it	• If difficulties do arise in the relationship, try to examine why this is occurring and seek outside help
• Be prepared to deal with areas that you find difficult.	• The trainee should agree to the topics to be considered and be in line with their personal learning plans
	• Avoid colluding with the trainee to evade topics which cause the trainee difficulty.

3. Learning Strategy Proformas

Open/Distance/E-Learning

Description (What is it)

An educational programme which allows:

- Independent learning with learners choosing their own place and time of study

- Instruction provided through print or electronic format

- Variable content of learning, from generic to vocational skills and knowledge.

How to do it

- The distance programme should be designed with the educational objectives of the learners in mind

- The programme can be self-contained e.g. web-based, a single video or CD, or incorporate a variety of sources of materials and activities which make up the learning package

- When incorporating electronic form of material, look for material which has been professionally developed

- Development of your own material will require experts in the content, education design, and design in the medium chosen e.g. video or web page design. This can be expensive and may require a strategy for electronic support and updating

- Plan a support mechanism for the learners. For example, 1-1 e-mail tutorial support, use of e-mail discussion lists, establishing peer support groups, face to face group meetings from time to time

- Can use material in group settings to open topic, consider content, discuss etc

- Can be a list of reading, videos to watch and activities to do in an ordered fashion. Self-assessment instruments can be incorporated at relevant points.

Tips for success

Learner	Trainer
• Flexible learning requires self-discipline	• Use clinical opportunities (out-patients / ward rounds) to discuss application of content
• Can choose time / place - but stick to it. It is easy to find something with higher priority	• Ensure support mechanisms are being used
• Self-directed so take responsibility for your own learning	• Don't be tempted to use poor quality material
• Work at own pace but set yourself targets	• Can incorporate assessment material to monitor progress.
• Can use the material time and again for revision / reminders	
• Quote articles which interest you and colleagues.	

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3. Learning Strategy Proformas

Peer Learning

Description (What is it)

- Trainees learn from someone slightly higher but close to their level of knowledge or status

- Trainees can learn from peers of equal or lesser status but having different work experiences

- Being closer in knowledge and status, the learner feels freer to express opinions, ask questions, and risk untested solutions

- The interaction between instructor and pupil is more balanced and more lively

- Can be formal or informal; often opportunistic (on the job or in social settings).

How to do it

- Learners should seek out learning opportunities - this can be informally in a social setting such as the coffee bar or in a work setting

- The work environment should be a learning environment where everyone is willing to share their expertise and to seek expertise of others

- Learners should be encouraged to share their daily events or incidents (maintaining confidentiality) and share thoughts about alternative actions

- Pair groupings can be set up formally, and specific learning objectives identified

- Create time to review what has been learned from peers. Learners should be encouraged to discuss their learning further with seniors and educational supervisors.

Tips for success

Learner	Trainer
- Look for the opportunity to learn - Seek help from the right person - Reflect, seek feedback, discuss further - Record skills learned (reflective log book) - Teach others when you have skill - Learn from different approaches and styles - Recognise that junior teachers and multi-professional teachers have a lot to offer.	- Encourage trainees to seek help from each other - Seniors & Multi-Professional Team - Be involved in reflective practice - Beware of poor practice being passed on - Be patient.

3. Learning Strategy Proformas

Problem Based Learning

Description (What is it)

- All stages of learning being centred around a specific problem
- Centred around a real clinical problem, ideally a real case, with numerous (planned) learning outcomes
- Independent learning but with a trainer acting as a guide.

How to do it

- Trainer outlines a problem that requires several lines of enquiry
- Trainees must have the skills required to follow the lines of enquiry so the problem should be chosen to differentiate between learners' needs
- Trainees follow lines of enquiry and collate information gathered
- Trainer and trainee(s) reflect on the information gathered and discuss the implications of the findings
- Opportunity to develop critical skills for evidence-based medicine
- Should become routine part of medical practice.

Tips for success

Learner	Trainer
- Be involved and follow all lines of enquiry thoroughly - Remember the patient is the primary concern	- Careful choice of the problem / case will maximise potential for learning - Use the opportunity to develop your own professional knowledge

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3. Learning Strategy Proformas

Project Work

Description (What is it)

- Self-directed learning about designated areas of skills or knowledge based on personal research of the area
- Either written project as essay, paper, poster, or oral presentation
- Can be done in groups
- Requires good supervision by designated supervisor.

How to do it

- Self-directed learning
- Negotiate a topic with the learner that is relevant to the learner's present post and to the learner's educational needs
- Supervisor should monitor the project format and method
- Can get members of group to explore and develop project together
- Learners need access to sources of information.

Tips for success

Learner	Trainer
• Flexible learning so can choose time / place but show commitment	• Flexible training so readily adaptable for shift work
• Self-directed but seek help when needed	• Less direct formal input needed but monitor progress from time to time
• Excellent opportunity for multi-professional and multidisciplinary	• Use clinical opportunities to develop content of project
• Can support shift-working through having group projects with common outcomes (for day or night teams)	• Can require close supervision and support - but don't do the project for them!
• Possible seed-corn for future research/publication.	• Use the project to support service developments / change.

3. Learning Strategy Proformas

Question and Answer

Description (What is it)

- A professional two-way interaction between healthcare professionals

- From learner to teacher to seek clarification or new information

- From teacher to learner to shape learning - to promote thinking and understanding

- From teacher to learner to assess or check on understanding

- Is an opportunity for education as well as 'the business' of patient management

- Allows for development of clinical skills and professional attitudes

- Does not require huge amounts of preparation time.

How to do it

- Develop from good general clinical communication skills

- Can be used in a wide variety of clinical and formal educational sessions

- Adapt to the needs of individual trainees - choose questions related to the intended learning outcomes

- Ask a simple question moving to complex

- Wait for a response - do not rush the learner

- When promoting thinking and understanding, ask questions that lead the learner along a logical pathway, gathering relevant information and ideas together to reach the intended endpoint

- If an incorrect answer is given, use the opportunity to find out why the learner had come to that answer - it shows you the way forward for teaching them

- Give praise and constructive feedback.

Tips for success

Learner	Trainer
• Show willingness and enthusiasm to participate	• Encourage and don't humiliate
• Don't be afraid to ask questions	• Invite questions from trainee and show you are interested
• Be aware of your own educational needs	• Be aware of the trainees' educational needs / objectives
• Learn from all team members	• Allow sufficient time to develop ideas
• Set aside time to participate.	• Lead by example.

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3. Learning Strategy Proformas

Reflective Analysis of Logbooks/ Diaries/ Portfolios/ ePortfolios

Description (What is it)

- A collection of evidence of learning, experiences or achievement

- A focus on both personal and professional learning

- Records of activity and learning that are descriptive and reflective

- Time consuming but will develop awareness of the learning process

- Is an aid to reflection on the learning process.

How to do it

- Agree that it will be useful

- Create time to do it - Learner

- Create Time to review it - Trainer

- Need appropriate documentation - pocket sized, electronic

- Plan what you will record and the format of the documentation

- Should be linked to the personal development plan and contribute to the appraisal reviews with the Educational Supervisor

- Can include a list of clinical procedures undertaken, narratives of events, significant incidents, books read, discussions with seniors, etc

- Should include reflective comments that identify what has been learnt and where to go next in the development process (what should be learnt next).

Tips for success

The reflective log book will help drive reflective practice and will encourage learning. If nothing was learned then that must be addressed.

Learner	Trainer
• Value the diary / log book - in itself - as evidence of learning	• Encourage the practice
• Find time to reflect and record - e.g. end of shift	• Review regularly
• Consider shorthand - notes - style	• Incorporate with appraisal
• It must not be a chore.	• It must not be a chore.

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3. Learning Strategy Proformas

Reflective Reading

Description (What is it)

- Reading to increase knowledge and to make connections with prior experiences

- Reading books, journals and other materials effectively

- Reading linked to learning objectives.

How to do it

- Read regularly - an hour in total a week at minimum

- Plan reading that relates to what you have seen / discussed in the previous shift / day / week

- When on duty, take notes about topics for further reading, e.g.

  o The meaning of a physical sign

  o The implication of a test result

  o Management of a condition

  o A previously unseen disease

  o An update on a new advance

- Be aware of why you are reading

- Skim, scan or read in depth according to the purpose

- Note down questions that arise while you are reading for follow up through discussion or other methods.

Tips for success

Learner	Trainer
- Start with short texts or scan read to find relevant text	- Encourage reflective reading

- Skim read a section first to get perspective, then read it properly
- Regularly scan core journals
- Keep articles or details of reading sources in a systemised file
- Learn how to read a paper*
- Minimise aimless browsing
- Do not read medical literature when tired or stressed
- Study for short periods - efficiency drops after 20 minute.

* Greenhalgh T. How to read a paper. BMJ Publishing, 1997.

has been read and learnt
- Make suggestions for further reading

3. Learning Strategy Proformas

Role Play

Description (What is it)

- Trainer, trainee or both act out a role to enable the trainee to have a "near-to-real" experience

- Heightens, within a safe environment, the awareness of the emotions and attitudes that arise in such situations

- Trainee can experience the effect of different factors on the scenario and try different ways of approaching that situation

- Trainer can provide immediate feedback on the effect of the trainee trying a range of different strategies

- Can be used to consider both clinical and non-clinical scenarios

- Can be used both with individual trainees and with groups of trainees - in groups trainees can take on different roles, learn from each other and provide immediate feedback for each other.

How to do it

- The setting needs to be as near to the real situation as possible

- The trainer needs to identify what attitudes or skills are to be considered and then draw up a reasonably detailed description of the role for those who are to role play

- In groups, where some are observing and providing feedback, the trainer also needs to provide guidance on giving feedback

- Roles can be acted out before a situation arises, after the situation has arisen, or sometimes even during a situation

- Sufficient time is needed for the players to get into their role.

Tips for success

Learner	Trainer
• Make sure you understand what is expected of you	• Encourage but don't force it on people who find it uncomfortable
• Get right into the role	• Make clear what you want to achieve
• Relax and enjoy the role	• Make role realistic and clear
• If you are feeding back make it constructive.	• Step in if needed
	• Ensure feedback is constructive.

3. Learning Strategy Proformas

Shadowing

Description (What is it)

- A doctor in training in a supernumerary capacity works very closely with a colleague

- The shadower will normally have some understanding of the role but requires practical experience

- The shadower is closely supervised and will not have direct patient responsibility which will rest with the person whom he or she shadows

  o A good example is of a final year medical student shadowing a Foundation Year One doctor

  o This learning activity allows practical familiarisation with the role and also provides an opportunity to experience this role accepting some responsibility but in a heavily supervised manner

- Shadowing is particularly useful in developing practical real life skills

- Shadowing may also be applied to the development of multi-professional skills e.g. shadowing specialist nurse, physiotherapist etc

- It may also be useful at a more senior level e.g. shadowing Consultants involved in managerial roles

- It may also be used for observing and initial learning about specific skills e.g. breaking bad news.

How to do it

- Plan in advance, ensure that both the shadower and the showed are aware of the objectives of the shadowing

- Ensure that all involved including the multi-professional team clearly understand the role, responsibility and limits of the person shadowing

- The shadower should be actively involved

- Plan the timetable on the person being shadowed. Include time for reflection together

- Experience should be documented by the learner (Reflective Log book)

- Ensure adequate supervision to make the shadower feel safe.

Tips for success

Learner	Trainer
- Think of the shadowing as a most valuable activity to prepare for the real role - Make an effort to be helpful and part of the team - Seek advice without being irksome - Make a valuable contribution.	- Shadowing is a practical activity and should be enjoyed - It will be valued by the trainee but you can learn from it too - Ensure the trainee feels safe and understands the level of supervision by both junior and senior staff.

3. Learning Strategy Proformas

Significant Incident Analysis

Description (What is it)

- Reflection of an incident of particular significance, either positive or negative

- Most commonly used to consider an incident in which a significant problem, or success, arose in the clinical care of an individual patient

- Can also be used for other significant events such as a difficulty arising in the relationships within a team

- Identifies ways forward to improve clinical practice.

How to do it

- Reflection of an incident of particular significance, either positive or negative

- Most commonly used to consider an incident in which a significant problem, or success, arose in the clinical care of an individual patient

- Can also be used for other significant events such as a difficulty arising in the relationships within a team

- Identifies ways forward to improve clinical practice.

Tips for success

Learner	Trainer
- Be prepared to consider difficult issues - You will learn most if you are prepared to be open and honest, reflect on all the detail - Consider how the situation might have been better managed before others make their suggestions.	- Be sensitive to the issues that can arise - Don't rush the discussion - Avoid destructive comments - If the trainee isn't dealing with the crucial issue, explain what you see as important and why - Give positive feedback as well as constructive criticism where appropriate.

3. Learning Strategy Proformas

Simulation

Description (What is it)

- The use of a controlled or artificial environment to simulate a situation

- Can include the use of dummies or resources to simulate patients or body parts

- Can include simulation computer materials or robotics

- Useful where the real situation would be dangerous to the patient.

How to do it

- Simulation can be expensive if specific equipment is needed but, for some clinical procedures, cheap and simple resources can be created

- Modern simulation equipment is now close to the real situation (skills labs, ResusciAnnie etc)

- Trainers and Trainees need to be fully trained in the use of special equipment

- Planning and preparation is essential to avoid time being wasted on procedure queries in the simulated situation

- An open mind and imagination is required to make the simulation "real"

- Supervision is essential to avoid reinforcement of errors although simulation without supervision is possible, for example, if video of sessions can be used to de-brief later

- De-briefing is essential and feedback given should be constructive.

Tips for success

Simulation will play an important part in future medical education. It is excellent for specific situations and it removes risk to patients and the service.

Learner	Trainer
• Prepare - Theory, background related issues • Familiarise yourself with equipment • Be prepared to allow simulation to be real • Do not be intimidated - enjoy it.	• Familiarise yourself with equipment • Create a learning environment • Realism but with "fun" • Some trainees are intimidated by simulation - be aware • Use de-brief sessions to help perfect techniques and improve practice.

3. Learning Strategy Proformas

Structured Observation

Description (What is it)

- A trainee watches an experienced professional perform a task or carry out a skill - usually under controlled conditions e.g. on a teaching list - but may be part of service provision
- Can be for practical skills but particularly useful for generic skills such as communication with patients, breaking bad news, working as a team.

(Can also be used as an assessment tool in which the trainer observes the trainee)

How to do it

- Focus of observation should be linked to the learning objectives of the trainee
- The trainee is prepared by being given a written, structured framework in advance of the observation period showing what specifically to focus on for observation period
- The trainee can identify relevant opportunities for the observation e.g. particular cases on a ward round
- Trainer can identify specific opportunities for the observation e.g. on a teaching ward round
- Trainee must make it clear to the person training that they will be observing rather than participating
- Trainee notes down what they have observed
- De-brief session should be held immediately afterwards.

Tips for success

This is a powerful learning tool but requires the trainee to be able to observe effectively.

Learner	**Trainer**
• Prepare - be familiar with the foci for observation • Take notes and be ready to discuss your observations at the de-brief • Take note of questions you need to ask - leave them for the debrief so as not to interfere with the action you are observing.	• Be willing to accept the trainee as a non-participant observer • Create time and opportunity (Teaching List) where appropriate • Encourage questions at the de-brief and two-way interaction.

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3. Learning Strategy Proformas

Team Learning

Description (What is it)

- Two or more trainers are involved in the teaching at the same session

- Used when teachers have different expertise which contributes to the same teaching session.

How to do it

- Trainers must plan the session together to avoid possible duplication

- Trainers should take responsibility for areas of their own strength

- The session should be well structured so that each trainer knows the parts they will lead and the parts they will be in a supporting role

- The team can consist of senior and more junior doctors (e.g. Consultant and StR), and can take advantage of the mix of expertise in multi-professional teams

- Trainers in the team will employ a variety of teaching strategies according to the planned learning outcomes

- The teaching should be evaluated jointly by the team members

- Assessment of the learning can be formal or informal e.g. questions posed at the end of the session, short multiple choice tests.

Tips for success

Trainer

- Communicate with each other before, during and after the teaching
  - Exploit the strengths of each team member.

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3. Learning Strategy Proformas

Tutorials

Description (What is it)

- Sessions where trainer and trainee(s) consider a topic in some depth

- Used for individual trainees or small groups rather than large groups.

How to do it

- Needs time and preparation

- Agree relevant topic with trainee - can be set by trainer to explore issue considered important for trainee, or by trainee requesting help or discussion over a particular topic

- Both trainer and trainee undertake appropriate preparatory work

- Ensure active discussion during the tutorial

- Agree appropriate follow-up work.

Tips for success

Learner	**Trainer**
- Be prepared to suggest topics - Focus on areas where you need help - Be prepared to do some preparatory and follow-up work - Be prepared to discuss as well as to listen.	- Work on topics relevant to trainee - Identify most important areas of the subject and concentrate on them - Keep trainee involved and the tutorial interactive - Check during tutorial that trainee is picking up the intended messages - Don't use tutorial to pursue a hobby horse.

3. Learning Strategy Proformas

Video Analysis/ Peer Observation

Description (What is it)

- Being observed in a non-judgemental way by a peer (A) or being videoed while undertaking a clinical procedure or consultation (B).

- Using the information from an 'extra pair of eyes' to reflect on performance and to identify strengths and areas for improvement.

How to do it

a. Peer Observation

- o Trainee chooses a peer to act as observer. The trainee must feel comfortable and unthreatened by the status of this observer

- o Trainee identifies aspect of his/her practice which they wish to improve or to evaluate and communicates this to the chosen observer

- o Observer prepares observation record sheet with suitable headings relevant to the focus for observation - negotiate with trainee

- o Time is set aside at the end of the observation period to discuss events and the trainee and observer share perceptions

- o The observer must be non-judgmental but offer descriptions and questions about what they have seen and heard

- o Trainee reflects on the observations and identifies what they have learned and targets for future action

- o Identified targets should be discussed at appraisal reviews with the Educational Supervisor

b. Video analysis

- o Suitable when the trainee is not mobile e.g. consultation in outpatients, in a simulated situation practising a clinical procedure, special unit

- o Video should be set up beforehand to be non-intrusive

- Where relevant, patient's permission must be sought

- After the event, trainee views video alone and analyses through reflection on what they have learned and ways forward for improvement - document this

- Trainee should then discuss their reflections with a senior and identify ways forward

- Identified targets should be discussed at appraisal reviews with the Educational Supervisor.

Tips for success

Learner	Trainer
• Choose an observer you feel comfortable with • Keep an open mind - don't be dismissive of what the observer says • Remember the observer is there as an extra pair of eyes - to see things you miss because you are too busy getting on with the work itself • When using a video, have a dummy run first so that you are not too conscious of it being there.	• Be constructive and non-judgmental • Provide information the trainee might be too busy, focussed or anxious to notice e.g. patient gestures, attitudes.

3. Learning Strategy Proformas

Workshops

Description (What is it)

- Opportunity to learn practical skills in a controlled setting

- Preceded by relevant reading (possibly to complete an MCQ on arrival)

- Consisting of short lectures and demonstrations interspersed with scenario practice, rehearsals and practical skills opportunities

- Opportunity to link theory to practice.

How to do it

- Include time and preparation

- Ensure equipment and materials are available and the environment is safe

- Start with a demonstration and link to theory

- Prepare instruction sheets for each learner so that they can concentrate on the skill rather than trying to remember the procedures they have been told to follow

- Trainer should monitor and correct errors before they become established practice

- Allow the learners to share their results / achievements with each other

- Build in assessment as part of the workshop.

Tips for success

Learner	Trainer
• Seek help if you are unsure	• Be well prepared and check equipment
• Learn from each other.	• Monitor regularly to help those having difficulty
	• Beware of attention seekers who get you to do the work for them.

4. A Typical Week for a Trainee and a Trainer

A Trainee's Week

The week starts with a handover. This is supervised by the ST4, who is keen that we describe the cases using problem lists, prioritise them and finally hand a written list of tasks to the oncoming staff. At each handover we also focus briefly on two cases of our choice to present up to ten facts we have learnt: this encourages us to refer to bench books in the department or the internet in the ward resource room for a few minutes on each shift.

I then attend the post-take ward round with the consultant. This provides more valuable feedback after the shift on call. At the end of the ward round, there is a buzz-group, for a few minutes only, where trainees can raise points generated in the ward round or elsewhere: a lively discussion often follows. Sometimes trainees depart with a task to complete before the next ward round, such as looking up in the library an answer to a point no one knew how to solve.

With a shift system there are more trainees in each department and this dilutes experience with procedures. The hospital has a clinical skills laboratory, which is open to trainees in weekday hours, unless booked for a directorate-based session. This is where I can go to practice cannulation for peripheral and central lines and other skills. This makes me feel more confident I undertake directly observe procedures as a workplace-based assessment on the ward. There are a variety of simulators, such as one for resuscitation, which are enjoyable to use and increase confidence when it comes to the real thing. To avoid the 'learning curve' in consultations, especially difficult ones, we have also had role play sessions with actors - which feel very realistic.

I am scheduled to attend a special clinic this week. This is booked with few patients, who present a range of teaching vignettes. Trainees will see and then be taught on these patients; the medical management is conducted personally by the consultant. Many patients are invited for their physical signs, so structured observation is especially important.

I have been given a clinical audit project to do. This is supervised by one of the consultants and I have to discuss my progress with him this week. The audit will be presented at a tele-conference in a fortnight's time, so I must rehearse with this modality soon.

I am studying for a higher examination as are others in the department (inevitable now that there are so many on the staff). I have used distance-learning with a web-based course for the first part of the exam. The clinical part of this exam is soon. We have bedside teaching sessions with the registrars on the day shift and sometimes at night. Peer learning is obviously important, but supervised one-to-one teaching from the consultants is not uncommon: (they say it is an investment as, if we pass our exams, the reputation of the department will grow and it will attract the best applicants. Well, we're not complaining!) I have found that I enjoy teaching others and that doing so helps me to learn.

Not every week is as well-stocked with educational experiences. However, having been educated in a problem based learning environment, I am motivated to use as many learning opportunities as possible. Ward work provides many of these and will give me the confidence and experience I need to progress in my chosen specialty.

4. A Typical Week for a Trainee and a Trainer

A Trainer's Week

The Monday morning departmental business meeting, attended by outgoing night shift trainees as well as incoming day shift trainees ensures that service and education is planned in the coming week. Knowing the timetable and which specialist clinics are happening, for example, helps trainees arrange attendance and trainers to organise and plan those clinics that trainees are going to attend.

In the morning clinic, there is a GP specialty trainee (ST1) observing and a pre-medical school student gaining work experience. Education is opportunistic and has to be learner-centred, due to the trainees very different learning needs. The consultant facilitates the process for both. The ST4 trainee attending the clinic comes in to ask for guidance on one patient during the clinic itself, but we sit down for a de-brief about the patients and her decisions at the end of the morning - part of supervised reflective graded responsibility. The ST4 trainee undertakes to seek out the answer to a question, not covered by the reference textbook present, and tell me as part of my own peer learning. On the afternoon ward round - a quiet one because I have not been on duty over the weekend - there is an opportunity for some bedside teaching. I also stimulate a discussion about medical ethics and death in relation to a recent death, expected but not witnessed by a particular trainee.

The next morning's departmental clinical meeting is well attended by consultants and trainees, who brainstorm about the methodology of a clinical audit of deaths in the unit and wider community. At lunchtime there is a video, which can be viewed by the trainees not present at another time, although they will miss the lively discussion afterwards.

The specialist clinic next day is run in conjunction with a visiting consultant from a tertiary centre and is observed by two trainees.

On Thursday, my day on call, I attend the trainee's handover and suggest brief learning points on two of the patients. The follow-up outpatients' clinic again has an ST2 trainee present as an observer. During a gap we get a chance to discuss the trainee's distance learning project. At lunchtime there is a journal club. I am also present on the early evening handover: many of the patients have changed or have updates on their problems. I see 3 patients with the ST5 trainee on call for the evening shift (consultant and trainee seeing patient together -- this can be an opportunity for workplace-based assessments

when there is time). That night I am called in to assist with a difficult clinical problem, which the ST3 trainee and I cannot solve by phone discussion (the ST3 has followed the unit guidelines on the clinical management of the case and on phoning for senior advice out-of-hours). An episode of one-to-one-teaching then occurs.

I do not get to the next handover, but on the post-take ward round the next morning, continuity of care rests with me and a new clinical incident is revealed. Questions are asked about handover procedures, following which critical incident review/significant event analysis the trainees themselves make suggestions for improvement.

It is still early in the six-months post in this rotation. Later on that Friday I meet trainees for their first review of training, during which learning objectives for the six-month post are set, plans are made for project/assignments and advice given on reflective learning. The second review, at the end of the training period, contains a section in which feedback is given to each trainee, based on assessments of my colleagues, the nursing staff and myself.

At the weekend, I am on call and do a ward round both days with the ST1 trainee, while the ST4 trainee sees the patients on another part of the unit. This is an opportunity for one-to-one-teaching with the ST1 and, if planned properly, workplace-based assessment, especially case-based discussions, with direct feedback to the trainee on the previous day's admissions and their management.

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5 Further Resources, Information and References

Resources:

Appraisal Skills   http://www.faculty.londondeanery.ac.uk/e-learning

Academy of Medical Royal Colleges   http://www.aomrc.org.uk

British Medical Association web site: http://www.bma.org.uk

Conference of Postgraduate Medical Deans   http://www.copmed.org.uk

Department of Health web site   http://www.dh.gov.uk

NHS e-portfolio   https://www.nhseportfolios.org

(just one of many sites used)

European Working Time Directive at: http://www.dh.gov.uk

The Gold Guides (2008, 2009)   http://www.mmc.nhs.uk/default.aspx?page=281

Modernising Medical Careers   http://www.mmc.nhs.uk

Postgraduate Medical Education and Training Board http://www.pmetb.org.uk

Work Place-Based Assessments   http://www.pmetb.org.uk/wpba

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Earlybrave Publications Ltd.

6. Appendix 1: Membership of the Working Group

Name	Affiliation
Professor Peter Hill (Chair)	UK Conference of Postgraduate Medical Deans
Professor Sir George Alberti	Royal College of Physicians
Dr Ian Anderson	Faculty of Accident & Emergency Medicine
Professor George Bentley	Royal College of Surgeons
Dr Sue Cavendish	Educationalist, University of Leicester
Dr George Cowan	Royal College of Physicians
Ms Christina Edwards	Regional Director of Education Training and Workforce Planning
Dr Natasha Gordon	Trainee Medical Officer RAT
Dr David Graham	UK Conference of Postgraduate Medical Deans
Professor David Hall	Royal College of Paediatrics & Child Health
Dr Shelley Heard	UK Conference of Postgraduate Medical Deans
Dr Brendan Hicks	UK Conference of Postgraduate Medical Deans
Dr Neil Johnson	UK Conference of Postgraduate Medical Deans
Mr Paul Loveland	Department of Health
Dr Deborah McInerney	Department of Health
Mr Mike Pedler	Facilitator
Anne Rawnsley	Trainee, Research Fellow
Dr Daniel Saunders	Trainee
Professor Robert Shaw	Royal College of Obstetricians & Gynaecology
Dr Frank Smith	Association for the Study of Medical Education
Dr Alistair Thomson	National Association of Clinical Tutors

Note: We are indebted to the efforts of Dr Sue Cavendish and Dr Neil Johnson for the development of this matrix of educational strategies.

Revised by:

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Liverpool and Cambridge, 2009

6. Appendix 2: The European Working Time Directive and Regulations

- The European Working Time Directive (EWTD) was already in force for staff working in the NHS in 2002 but an exemption had been negotiated for a number of years for junior doctors in training to allow extra time for the service to implement the necessary changes. An implementation timetable was agreed with the European Commission.
- The EWTD has now become the European Working Time Regulations.
- The process of implementation is near completion, since the regulations came fully into force in August 2009. From this time, under the EWTR, the maximum average allowable working week is 48 hours and the various requirements for daily and weekly rest will apply. These provisions are:
    - 11 hours' continuous rest in every 24 hour period
    - A minimum 20 minute break when a shift exceeds six hours
    - A minimum 24 hour rest in every seven days, **or**
    - A minimum 48 hour rest in every 14 days
    - A minimum of 4 weeks annual leave
    - A maximum of 13 hours work in 24 for night workers (if applicable).