An analysis of the new educational demands in pediatric postgraduate training

Hugh Davies, Owen Hanmer, Linda Hutchinson, Andy Raffles

Consultants are now required to establish and supervise educational programmes for specialist registrars and senior house officers (SHOs). Fifty per cent of trainees' salaries is channelled through deans of postgraduate medicine, money which can be withdrawn if the educational component is deemed inadequate. There seems to be a willingness to take on this educational task, although, as Wilson has highlighted, consultants have expressed concern about these new demands.

In addition, new working practices have changed the process of training. Medical teams have expanded to meet the reduction in junior doctors' hours of work. Consequently, seniors have fewer occasions to work with each junior and may be less able to observe and assess their performance. Concern has also been expressed that the time spent on patient contact has now decreased to a level incompatible with training, although Paice disputes this. Nevertheless, the shorter training makes it imperative to maximise the educational value of all aspects of clinical practice.

Despite reduction in trainees' hours of work, they are still working longer hours than most of their contemporaries in other walks of life. There is evidence that a comfortable balance between service and training has not yet been achieved. Baldwin's review of Scottish medical SHOs in 1996 identified that education was limited by increasing clinical demands.

The content of trainees' experience also highlights another conflict. Their role is often markedly different from that of the trainer, with greater emphasis on the acute service and less on longer term medical management and the consultant's institutional roles. This discrepancy was noted in the United States as part of a wider discussion about the survival of general medicine and general paediatrics. Reuben et al were critical of the loss of focus on the primary goal in residency training in the rush to provide a work force to prop up acute services. This has been mirrored in the UK by Kearley who identified similar problems in GP vocational training schemes.

The first section of this article examines how an environment conducive to learning can be established. The second section outlines the processes of appraisal, assessment, and annual review of trainees, in particular how one region (North Thames) is embarking on implementation. Although the underlying principles of these processes apply across the UK, details may vary between regions.

### Section 1. Creating an environment conducive to training

**RECOGNISING TRAINEE'S NEEDS**

While not underestimating the importance of outcome and its assessment, the process of learning should be the focus at unit level. Using Maslow's hierarchy for motivation to learning as a starting point, the general and individual needs of trainees can be identified (table 1). Many are self-evident, but there is evidence that feedback is often the most important for the trainee. In the postal survey of Scottish SHOs, the quality of feedback had a direct influence on the perception of learning, ability to cope, and relations between senior and junior staff. Providing guidance by reviewing performance is probably one of the most valued and appreciated aspects of a unit's training programme.

<table>
<thead>
<tr>
<th>Needs</th>
<th>Improved by</th>
<th>Decreased by</th>
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<tbody>
<tr>
<td>Physiological</td>
<td>Lack of distractions</td>
<td>Lack of sleep, Hunger</td>
</tr>
<tr>
<td>Safety</td>
<td>Feeling supported</td>
<td>Threat</td>
</tr>
<tr>
<td>Belonging</td>
<td>Feeling part of a team</td>
<td>Exclusion</td>
</tr>
<tr>
<td>Self esteem</td>
<td>Praise, Constructive feedback</td>
<td>Humiliation</td>
</tr>
<tr>
<td>Self fulfilment</td>
<td>Perceived relevance, short term aims, Impending assessment</td>
<td>Passivity, Perceived irrelevance, Unrealistic expectations</td>
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Table 1 Maslow's hierarchy of needs for motivation. It is proposed that each category needs to be satisfied before the next (lower) can be met.
Table 2  Distinctions between appraisal and assessment

<table>
<thead>
<tr>
<th>Appraisal</th>
<th>Assessment</th>
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<tbody>
<tr>
<td><strong>Principles</strong></td>
<td><strong>Principles</strong></td>
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<tr>
<td>The process must be clearly understood, confidential and separate from assessment</td>
<td>A structured and standardised process with a right of appeal</td>
</tr>
<tr>
<td><strong>Aims and objectives</strong></td>
<td><strong>Aims and objectives</strong></td>
</tr>
<tr>
<td>• Identify educational needs and provide opportunities</td>
<td>• Establish whether goals have been achieved</td>
</tr>
<tr>
<td>• Identify strengths and weaknesses</td>
<td>• Decide when trainee is ready to move on to higher level</td>
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Incorporating education into existing activities

Basing education on real experiences is the most effective way to promote and consolidate longer term learning—coal mining is best learnt at the coal face, not in the classroom. How, therefore, can the two processes run smoothly alongside each other, accommodating their conflicting requirements?

Pre- or post-clinic/ward round reviews

Such discussions can help the trainee understand and learn from his or her clinical exposure. This has also been shown to have service benefits. Watters and Milford demonstrated that in their specialty (ENT) preclinic discussions between consultant and junior staff improved care by reducing unnecessary follow up.1

Learning from observed consultations

The consultation is a synthesis of many simultaneous processes. Trainer and trainee will think at different speeds and pursue different clues in the consultation. There is then a danger that the observer loses the direction of the consultation. Trainers therefore need experience and training in “bedside teaching” to avoid this. Techniques such as prefacing the interview, breaking it down into constituent parts, stopping periodically to review progress, and asking questions can be used to keep trainee and trainer together. An alternative, if numbers permit, is for a third party to teach while the consultation continues.

Access to resources and topic teaching

Modern information technology now provides the possibility of rapid access to relevant material. Investment in this technology will offer benefit to service and teaching. Trainees, asked to review a patient’s particular condition, can contribute to service and his or her own learning. Ease of access to up to date resources will promote both.

“Micro-teaches” in clinical meetings

It is often claimed that teaching is too time consuming and cannot be incorporated into routine meetings. It is usually possible, however, to allocate five minutes within a clinical meeting. This provides an opportunity for the trainer to teach on a small topic and allow the trainee to concentrate on learning, free from service pressures for a short period of time.

Theme of the week

Identification of educational objectives that the unit can focus on during a defined period can be used to promote teaching and learning. These can be drawn up in advance, defined or requested by any group of staff, and disseminated through weekly timetables. There are possibilities to involve other disciplines in the team.

Formal teaching

Teaching sessions should aim to consolidate learning in clinical settings. Clear achievable objectives need to be agreed by trainer and trainee. The Royal College of Paediatrics and Child Health (RCPCH) logbook provides a core syllabus that can be used to ensure broad coverage and avoid duplication.

Section 2. Appraisal, assessment, and annual review

Training will be monitored by appraisal, assessment and annual review. For the first time trainees’ progress will be measured and a written record used as evidence of satisfactory completion of training.

Definitions

**Appraisal** has been defined as regular private meetings between the trainee and educational supervisor at which progress is discussed and future objectives set. It is designed to identify areas of strength and weakness. As such it plays no part in determining whether the trainee has reached standards that allow progress.

**Assessment** measures achievement against set standards and informs the regulatory process that oversees career progress. It is a formal and open judgmental process based on documentary evidence. Satisfactory assessment year by year will lead to the award of a certificate of completion of specialist training (CCST).

**Annual review**, under the auspices of the postgraduate dean, controls onward progress from year to year by reviewing results of assessment.

Distinctions

The distinctions between appraisal and assessment are shown in table 2.

Roles and responsibilities

It is the responsibility of the dean of postgraduate medical education to provide training for all those with a national or visiting training number. Training is implemented through the network of clinical paediatric tutors (or unit training directors) who are usually consultants and members of the RCPCH. The college has drawn up a syllabus for higher specialist training on which assessment can be made.7

Junior doctors or trainees now have the responsibility to work to achieve standards if they wish to proceed through training. They have the right to expect regular appraisal and assessment, through which they will be informed...
of their progress. Additionally the process allows the trainee to inform the tutor of the relative strengths and weaknesses of the post. Trainee committees have been established regionally and nationally to which the deans look to evaluate training standards.

THE PROCESSES

Appraisal

Appraisal can be seen as structured feedback, discussed earlier in this article. Successful appraisal depends upon the skills of the appraiser who needs to be able to listen, support, identify educational needs, and negotiate realistic objectives throughout the trainee’s appointment, in particular during the timetabled appraisal interviews.

It should cover educational, personal and professional development, career progress, and employment issues. Before the interviews the trainee is asked to prepare a self appraisal record, which should be a statement of achievements—objectives reached and training undertaken, courses and study leave taken, and particular strengths. A training record or portfolio of work© can support this. Disagreements can be arbitrated by the unit training director (paediatric college tutor).

It may not always be possible to maintain confidentiality where appraisal identifies problems which may threaten the safety of patients or the effective working of the clinical team. In these circumstances it is important that information that has emerged during appraisal is discussed in confidence with the regional advisor or postgraduate dean with the consent of the trainee. Disclosure should subsequently take place outside the appraisal process following local and national procedures.

Assessment

Assessment aims to establish whether the trainee has achieved the educational objectives of the curriculum and to help decide when trainees are ready for further experience and learning. The objectives of assessment should be to ensure the planned training programme has been completed satisfactorily, clinical and personal performance meet acceptable standards, excellence is recognised, and areas requiring further training are provided for. Assessment should be a formal, coherent, process with a right of appeal, fully understood by the assessors and those being assessed. It needs to be standardised, manageable, and closely related to the syllabus. It should focus more on skills and attitudes than on knowledge and be able to identify if minimum standards have been achieved. It is informed by the trainee’s self assessment and reports from the tutor and other staff. Assessors who are trained, supported, monitored, and evaluated independently must therefore undertake it.

Assessment could start in May or June in each year of the specialist registrar rotation to inform the annual review in month 11 and 12 (July and August) of each year. In years 1, 3, and 5 assessment will be an internal process undertaken by two local consultant paediatricians. The unit training director (paediatric college tutor) should undertake assessment and if possible the trainee’s supervisor should be excluded. In years 2 and 4 assessment will be undertaken by the unit training director or another local consultant paediatrician, and an external assessor who should be a unit training director from another unit in the region.

Each assessment should consist of an interview with the trainee to consider:

(a) the trainee’s self assessment and syllabus/training record
(b) the trainee’s portfolio of written work
(c) the educational supervisor’s structured report
(d) reports from staff, if appropriate.

At the end of the assessment, a summary form will be completed which identifies:

(a) if the educational programme has been completed satisfactorily in each relevant area of the syllabus
(b) if acceptable standards of professional and personal performance have been achieved
(c) if there is a requirement for additional training and assessment
(d) if there are concerns about the training programme
(e) if there are concerns about the trainee’s continuing training or career goals.

Annual review

By examining assessment reports, the annual review aims to establish whether trainees are ready to move on to the next phase of training. If standards are met, the regional advisor, as the dean’s representative, will issue a record of in training agreement (RITA) form C allowing the trainee to proceed to the next year’s programme. If performance has not met the required standards, trainees will be invited to attend an annual review for a more detailed interview. Subsequently, a RITA form C may be issued or, if further training is needed, a RITA form D or E will be issued. An appeal against RITA form D or E can be made. A review panel would be constituted to reconsider the outcome of assessment. A further appeal is only possible against the issue of RITA form E (table 3).

CONFIDENTIALITY IN ASSESSMENT

Assessment is not confidential. It therefore requires a systematic, objective, transparent, and documented method by which difficulties can be identified and subsequently resolved. Documentation is particularly important, as deans will require a record to justify any action taken. If assessment may delay acquisition of the CCST, the trainees will have a right to see on what basis decisions have been made. In North Thames very few trainees have failed to
Table 4 Problems and proposals

<table>
<thead>
<tr>
<th>Problem</th>
<th>Proposal</th>
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<tr>
<td>For the deans</td>
<td>• Their responsibility to provide training for all those with a national or visiting training number</td>
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<tr>
<td></td>
<td>• Designing and producing a written timetable of appraisal and assessment along with a suggested structure for appraisal and criteria for assessment based on the college core curriculum</td>
</tr>
<tr>
<td>For the trainers</td>
<td>• The need for documentation to inform annual review and possible appeal</td>
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<td></td>
<td>• Producing a “user friendly guide” with the clear understanding that modifications will be incorporated</td>
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<td></td>
<td>• Providing workshops in which to develop necessary skills</td>
</tr>
<tr>
<td>For the trainers</td>
<td>• Poor past experience of “educational guidance”</td>
</tr>
<tr>
<td></td>
<td>• A structure that helps trainees and trainers establish educational objectives that can be reviewed and assessed</td>
</tr>
<tr>
<td>For the trainers</td>
<td>• Perception of increased work load</td>
</tr>
<tr>
<td></td>
<td>• A structure that allows establishment of educational objectives that can be reviewed and assessed</td>
</tr>
<tr>
<td>For the trainers</td>
<td>• A clear definition of trainers’ expectations</td>
</tr>
<tr>
<td></td>
<td>• Drawing up standards that encourage uniformity throughout the region</td>
</tr>
<tr>
<td>For the trainers</td>
<td>• Variable abilities and attitudes of clinical tutors or unit training directors</td>
</tr>
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</table>

reach an appropriate level of performance, but the systematic approach has allowed deficiencies to be identified and remedial action taken.

PROBLEMS AND PROPOSALS IN ONE REGION

The North Thames department of postgraduate medical and dental education, working through the speciality training committee, established a working group to facilitate implementation.11 The aim was to develop a framework that could be used to guide and monitor the process and would provide a written documentation of assessment. It was recognised that this would be an evolutionary process; any documentation produced would need modification in the light of experience.

It was clear that consultants’ poor experience of appraisal and assessment and their perception of the increased workload (with little reward) was a major barrier. It was therefore important to anticipate the major problems that postgraduate training will present trainer and trainee. If these problems were addressed it would allow formulation of possible solutions and hopefully redress the prevailing negative attitudes.

The importance of assessment was clearly recognised. It is axiomatic that “assessment drives learning”; consequently any documents produced would be a major influence on what trainees perceived they needed to learn. Thus it was felt that assessment methods must be appropriate to postmembership training, higher specialist training being the last step before taking up a consultant post.

To provide standardisation, assessment was based around the RCPCH logbook. This would also address the shared concern of trainers and trainees that without guidance trainers could be practising and applying very different standards (table 4).

Conclusion

The quality of teaching ultimately depends on the teachers12 and their provision with adequate resources. Modern technology and educational theories may help but cannot be regarded as a substitute. Standards will be determined by the attitudes and skills of consultants in post; “training the trainer” will thus be a central theme for the future. The skills needed for supervision, face to face teaching, and educational organisation are not always innate. Coles13 has shown the value of providing opportunities for consultants to develop teaching skills. Such courses will also raise the profile and importance of teaching.

The introduction of structured training has given those responsible for the training of paediatricians a huge task. It can be seen, however, as an opportunity to evaluate and improve future training. Our previously ad hoc methods of training can be turned into systematic, objective, evidence-based learning and teaching experiences. The process will need to be reviewed and refined in the light of experience, changing clinical practice, and educational advice.

9 A syllabus and training record for general professional and higher specialist training in paediatrics and child health. London: Royal College of Paediatrics and Child Health, 1996.