C.O.M.E.T. – A novel educational method in clinical skills

From simulation to reality
Shibboleths of incompetence
Development of a clinical skills bus: making simulation mobile
“See one, do one, teach one!” – the uphill struggle for clinical skills acquisition
Acknowledgements

I would like to take this opportunity to show appreciation to all those involved with the production of the International Journal of Clinical Skills. This has been a time consuming task but every minute of it has been worth it!

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The International Journal of Clinical Skills looks forward to contributing positively towards the training of all members of the healthcare profession.
The clinical skills arena is an ever expanding field with an increasing wealth of knowledge; however there is no central resource for the sharing of evidence based research and information. The International Journal of Clinical Skills (IJOCS) is a peer reviewed International Journal, which will promote the sharing of information and evidence based research, as well as bringing together the clinical skills community.

The Journal aims to develop and maintain standards in research and practice, lay a platform for discussion and debate, and provide opportunity to present evidence based medicine and critical appraisal of research. Provision of this much needed resource for both students, teachers and healthcare professionals, will ultimately enhance patient care.

The IJOCS will be a regular publication, three times a year in the first instance, both online and in print. The implementation of the IJOCS website will provide a continual resource for daily use. Also, in conjunction with the ‘Clinical Skills Lab’, the IJOCS will allow access to an online database on over 200 clinical skills – launching in 2008.

A diverse range of reviewers support the Editorial Board, all of whom are leaders in their respective fields and the IJOCS prides itself on the quality of content. Contribution of original ideas, research, audit, policy, reviews, case reports and ‘Letters to the Editor’ are welcome from all those involved in this multidisciplinary field. Submissions are not limited to these specific publication types and your novel suggestions will be considered.

I wish to thank all those involved in the development of this unique venture – a Journal whose remit is highly significant to today’s needs.

Dr Humayun Ayub
Editor-in-Chief
International Journal of Clinical Skills

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Foreword

International Journal of Clinical Skills
– An exciting forum for clinical skills

There has been an explosion in the volume of medical information related to clinical skills, which are essential in our efforts to maintain optimal patient care. The International Journal of Clinical Skills (IJOCS) aims to disseminate this knowledge in an easily accessible form. This will not only enhance our attempts to provide a quality health service, possibly with some standardisation, but also provide a vehicle for teaching and learning, hence the Journal's motto – 'docendo ac discendo' (by teaching and by learning).

The IJOCS will not only serve as an avenue for publication of research papers, but will also act as a means of communication between clinical skills professionals at an international level. Consequently, those involved in the clinical skills field, can keep those in other countries informed of their activities, as well as offering best practice guidance.

Alongside this valuable publication, a continually evolving online database ('Clinical Skills Lab') will become available for students and teachers to access – this will hold extensive information on over 200 clinical skills. The Clinical Skills Lab will be regularly updated by all those involved in this field and provide a platform for discussion and debate.

The IJOCS also aims to present comment on items of specialist interest. For example, the current issue contains a paper by Professor Harold Ellis CBE, on 'Medico-legal consequences in surgery due to inadequate training in anatomy', and explores the potential niche for anatomical clinical skills training within the newly developed medical Foundation Years (F1 & F2). It is hoped readers will make use of the Journal to comment on matters such as this – and on others relating to the subject of clinical skills – by means of ‘Letters to the Editor’, research based evidence and shared practice.

In order for IJOCS to become an exciting forum for clinical skills, the Journal welcomes submission of innovative research, papers, reviews and case reports. Of course, submissions are not only limited to these specific publication types and your innovative ideas would be greatly welcome by the Editor.

I am confident that IJOCS will be appreciated by a variety of health care professionals, at an international level. It promises to be representative of an ever expanding field, and with the support of all those able to contribute, it will, without doubt become increasingly influential.

I wish those responsible for the production of the International Journal of Clinical Skills, the success which their initiative deserves.

Professor The Lord McColl of Dulwich CBE
September 2007
Feedback to enhance student learning: facilitating interactive feedback on clinical skills

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Introduction

‘I have spread my dreams under your feet,
Tread softly, because you tread on my dreams’
W. B Yeats, 1899

Talk with any group of clinical educators about feedback and there is immediate confusion between feedback to learners and feedback from learners. Feedback to students and trainees provides an appraisal of their performance and is intended to enhance their learning and improve their performance. Feedback from students and trainees is concerned with evaluation of teaching and improvements to the learning environment. This paper is solely concerned with feedback to learners. There are a number of ways in which students receive feedback on their learning. Foremost in most learners’ minds will be the feedback they receive from formal examinations. Other important forms of feedback include peer feedback and feedback from patients and carers. This paper focuses on the formal, verbal feedback that is given to students and trainees after observing them in a clinical activity.

Giving effective feedback has been described as ‘the life-blood of learning’ and as an ‘essential skill for all teaching faculty’. Feedback helps learners recognise their strengths and weaknesses, encourages self-reflection and increases self-awareness. Feedback also helps students and trainees plan future learning. A systematic review of the literature on feedback to licensed physicians (including house staff at different levels of training) concluded that feedback has a positive effect on their clinical performance, especially when given by a credible source over a period of time. There is also evidence that feedback increases confidence and helps reduce distress, and considerable evidence that learners place a high value on feedback. The following quote is typical of comments made by students:

… to get someone to actually sit down and properly listen to you and give you genuinely informed feedback ...its some of the best teaching I've had on any of my attachments.

Final year medical student, School of Medicine, University of Southampton.

Despite this general recognition of the importance of feedback, students and trainees frequently report that they do not receive enough feedback. The perception that there is too little feedback may be partly explained by learners failing to recognise or remember the feedback they have received. There is also considerable evidence confirming that learners really do receive very little feedback in clinical settings. It would therefore appear important to increase the amount of feedback learners are given and to maximise the process as far as possible within the constraints facing busy clinical educators.

The role of feedback in student learning

There are a number of models from education and learning psychology that help us to understand the role feedback plays in student learning. The experiential learning cycle based on the original work of David Kolb offers a model of learning based in experience. The model depicts a learning cycle: starting with concrete experience; moving through reflection and
Planning and preparing to give feedback

Planning is crucial to ensure that feedback is as effective as possible. From the start, it is important for the clinical educator to set the scene and to create a supportive learning environment. The feedback needs to take place in a suitable environment, away from patients and other students. The feedback should normally be given in private. It is important to have enough time for the feedback and to have agreed expectations for the process. Learners do not always recognise that they are being given feedback or remember having received it. Therefore it is important to clarify intentions and to agree when and what will be observed and when and where the feedback will be given.

In advance of the feedback session the teacher needs to decide on the key areas for feedback. As far as possible, the areas for feedback should be agreed in advance with the learner before the observation takes place. There will also be occasions when the student or trainee is unaware of their strengths and/or weaknesses and the teacher may need to determine either in advance or after the observation which feedback is most important.

In the School of Medicine at Southampton University, staff developers have devised the model shown in Box 1, and guidelines shown in Box 2, to help teachers determine the content of feedback. The model encourages clinical educators to identify specific areas for feedback related to learning goals and the point of observation.

Facilitating interactive feedback

There are three main approaches to the feedback process. The first was originally developed by Pendleton and has been widely used in clinical education10. This approach is sometimes caricatured as ‘the sandwich’ because it is associated with a pattern of always starting and finishing feedback on a positive comment. Corrective or negative comments are relayed in the middle of the sandwich. The Pendleton model was helpful in encouraging people to think about positive comments. Over time, however, it has suffered from over-use and is now so familiar to learners that they

Box 1 - Identifying feedback content

Point 1 - the starting point of the student learning episode. Think about the level the learner has already reached. Clarify his or her past experience and understanding of the skills being performed.

Point 2 - reflect on and agree the intended learning goals before observation. It is important to be realistic about goals and not to expect too much or too little from the student or trainee. It is also useful to think of learning goals in terms of the three domains: knowledge, skills and attitudes. For example, while observing technical competence you may also wish to consider communication skills or level of underlying knowledge.

Point 3 - armed with a clear understanding of Points 1 and 2, undertake the observation. Most learners will have moved along a line towards their learning goal but will also have some way still to go and may well have gone off the main path in some areas.

Point 4 - feedback should focus on acknowledging the distance travelled, while also helping the learner re-orientate towards the learning goal. It may also be appropriate to agree future learning goals at this point.

Box 2
Most of all, this is a collaborative approach which avoids the "but..." and encourages learners to take increasing responsibility for managing their learning and adopt a self-regulated approach to the intended learning. The improvement plan enables the learner to focus time for reflection before meeting again. The student’s own assessment is particularly helpful. This prevents the student from feeling threatened and helps to build self-confidence. Where the student appears overly self-critical, the teacher can encourage the student to see his or her own strengths and helped to build self-confidence. Where the student appears unaware of their failings, the teacher can focus on areas for improvement. The improvement plan enables the learner to focus on future learning and to tailor that learning to his or her own areas of greatest need.

An interactive approach avoids a number of common pitfalls. Starting with the student’s own assessment is particularly helpful. This prevents the build up to the ‘but’ following positive comments at the beginning. It ensures that the teacher understands the level of self-awareness in the learner. An overly self-critical student can be encouraged to see his or her own strengths and helped to build self-confidence. Where the student appears unaware of their failings, the teacher can focus on areas for improvement. Reviewing understanding and checking out feelings helps to ensure that the student doesn’t go away with misconceptions or emotional barriers to the intended learning. The improvement plan enables the learner to focus on future learning and to tailor that learning to his or her own areas of greatest need.

The importance of an interactive approach cannot be overstressed. Ideally the teacher is facilitating the student’s own reflection and ‘self-feedback’. As the learner becomes increasing proficient, the role of the teacher becomes more that of a critical friend. The aim is to encourage a student-centred approach in which learners take increasing responsibility for managing their learning and adopt a self-regulated approach to feedback. Most of all, this is a collaborative approach which avoids the humiliation that has sometimes been associated with feedback to learners, particularly in clinical situations.

There is some evidence that teachers avoid giving face-to-face feedback because they wish to avoid giving offence or provoking a defensive response. The interactive approach described above is the least likely to evoke a negative response. Research shows that students appreciate clear and direct feedback if it is given in a caring and respectful way, but from time to time it is inevitable that learners will react defensively. King suggests that resistance can be divided into four types: blaming - where the student blames someone else for the failings; denial - where the student can’t see the problem and rejects the feedback; rationalisation - where the student finds a justification for his/her performance; and anger - where the student directs their anger towards others, such as the teacher or the patient.

When resistance occurs the temptation is to become defensive in response but this is clearly not helpful to the student. The best approach is to explore the resistance in a collaborative way, without backing down. The teacher should aim to keep a collaborative tone and recap on the learner’s strengths as well as clarifying the corrective points. The main aim is to help the student or trainee to ‘own’ the problem and take responsibility for his or her own learning. If necessary, the teacher may want to suggest time for reflection before meeting again.

### Conclusions
Receiving constructive feedback is important for the development of medical students and trainees. Increasing the amount of feedback should lead to improvements in the clinical skills of learners and, in turn, to improvements in patient care. However, this will only be the case if the feedback is of a good standard and valued by the learner. While there are still some clinical educators that advocate a humiliating or belittling approach to giving feedback, the research cited in this paper confirms that a negative approach is counter-productive. The argument that ‘it never did me any harm’ doesn’t stand up to the evidence.

The interactive approach recommended here encourages clinical educators to build a supportive learning environment and to give feedback in an open and interactive way. Feedback that is focussed on helping the student or trainee learn and has his or her best interests at heart, is the most likely to be accepted as trustworthy and valuable.

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### References
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- History taking skills
- Communication skills
- Clinical examination/interpretation skills
- Practical skills

Not only will this valuable resource provide material to students as a learning tool and revision aid, for example, OSCEs, it will also offer educational materials for teachers from all disciplines, allowing some standardisation of practice. The Clinical Skills community will also be encouraged to contribute, making this database interactive.

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