CETL Conference Workshop Report

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Introduction

There is a significant interest in teaching and learning clinical skills amongst all health professions, however there seems to be considerable variation between and within different health care professions in their perceptions of what constitutes a clinical skill and how these should be taught and learnt.

In 2005 the strategic alliance between City university and Queen Mary, University of London was recognised by HEFCE as a Centre for Excellence in Teaching and Learning for clinical and communication skills and awarded a substantial grant to develop further as a centre of excellence, and disseminate best practice within these areas.

Part of the grant funded an extensive refurbishment and enlargement of our clinical and communication skills facilities and resources. One of the first activities completed by the CETL was a one-day conference focussed on maximising learning in the practice setting through sharing of ideas and current practice in clinical skills teaching and learning across the health care professions.

Within this conference, one workshop offered was entitled "Those other professions-what do they know about skills learning?" This report describes the process that we took in delivering this workshop and some reflections on the discussion generated.

Methods

The workshop was run by an Interprofessional team of facilitators representing the following disciplines: speech and language, medicine, nursing and midwifery. We employed a structured qualitative approach to enable the participants to gain a broader understanding of different health care professionals' views of clinical skills learning. We hoped that participants would leave with ideas that might influence their future practice.

After a brief overview and round of introductions, participants worked in small groups to develop a list of clinical skills that they taught. These were scribed on a flip chart. This exercise aimed to build a tacit consensus on what the group understood by “clinical skill”.

The main part of the workshop time focussed around a modified Nominal Group Process exercise. The nominal group process (Delbecq 1971) was explained to the participants by one of the facilitators and the topic "What is important in teaching and learning clinical skills" was given as the trigger. Initially participants were given an opportunity to clarify any issues about either the process or the trigger itself, and were asked to individually write down their own thoughts on this topic. The facilitator then went round each individual in turn asking for one response, which was scribed. Participants were asked to avoid obvious duplication. When there were no new responses the process was concluded.
The facilitator then led a general discussion on the topics which provided clarification on some areas. Each participant was given 10 coloured sticky dots, to identify the individual responses that they felt were most important. Participants were asked to use all of their votes, in any voting pattern that they felt appropriate. The votes were counted and the group’s consensus of the most important issues identified, ranked and discussed.
The session concluded with a reflective discussion about the issues raised.

Results/discussion

Attendees

The workshop was run twice during the day (AM and PM groups). The AM group had 12 participants and three facilitators, whereas the PM group had 7 participants and four facilitators.

The morning group contained nurses from both hospital and community backgrounds, and several nurses principally involved in education, three speech and language therapists, a midwife involved in teaching clinical skills, and two educationalists supporting health professions schools. One of the speech and language therapists had a connection with occupational therapy and physiotherapy, and two nurses were involved in training medical students. No medical doctors participated in this group.

The afternoon group had three participants from speech and language therapy, a GP, a podiatrist, a learning technician and a teacher working across several of the therapy skills family.

Perceptions of "clinical skill"

Some interesting themes emerged relating to the diversity of responses. There was clearly **no consensus** in understanding what is meant by "clinical skill" with a **wide breadth or range** of skills listed within and between groups. Individual skills were listed to **different depths**, some representing global skills ("observation skills" - relating to a nursing assessment including temperature, pulse, blood pressure and so forth; "Communication skills") with others describing more discrete, but whole-task skills ("blood pressure"; "Breaking Bad News"), and still other items identifying part-task skills ("information giving"). Different **conceptualisations of skills** emerged, including psycho-motor skills ("injection", "cannulation", "nasogastric intubation") and cognitive skills ("diagnosis", "treatment planning"). Affective skills, however, were not represented, although one group highlighted their importance. Some skills listed were generic ("prioritising work load", "team-working"), others were more specific to **clinical care** ("phonetic transcription", "infection control"). Although the data has not been formally analysed by profession, it was noticeable that there were differences between **different professional groups**, both in language used and concept of clinical skill.

In her review of the literature on medical clinical skills curricula, Martina Michels (2006) highlights that national and international curricula vary widely in their definitions of "clinical skill". While the British General Medical Council separates clinical skills from diagnosis and treatment, the Scottish Medical Schools include it under the heading clinical skills but separate the practical procedures from it. (Simpson J G 2002; General Medical Council 2004). The Royal College of Physicians and Surgeons of Canada does not even mention clinical skills but list all the procedures

(from history taking to treatment) under "diagnostic and therapeutic skills" (CanMEDS 1996). The international curriculum for global minimum in medical education includes most of the above under clinical skills, but divides it from critical thinking and problem solving (IIME 2002). The multitudes of skills might be represented in the 212 skills listed for the postgraduate doctors by the Danish Physicians (Moercke and Eika 2002).

What was important in T&L clinical skills?

As the discussions and results of the two groups varied significantly, we present these findings separately. Two particular points are raised by the summaries of these sessions. The first is to acknowledge that the wide range of issues, each identified as important, represents the complexity of skills learning.and the different definitions group members had of a clinical skill Secondly, when participants were asked to vote on these items, the ranking process revealed patterns in how participants prioritised key areas.

What did the morning group feel was important in T&L clinical skills?

The 38 issues deemed to be important by the group, when teaching a clinical skill were wide and varied in nature. These can be clustered under the following headings.

The learning environment:

Agreement was reached on the statement that the environment should be one where it was OK to make mistakes and share fears and concerns.

Patient/client centredness:

Surprisingly, the comment about **minimising risk to patients** did not gain any votes. However, it could be said that **the improvement of dexterity or technical skill prior to patient/client contact** takes such a concept into consideration, as does the remark **knowing why it is important to the patient.** The statement that **when performing a skill the student should be aware that there is another human being involved** appeared further down the list of priorities and would relate to the patient/client, as does **maintaining client-centredness** (also lower down the list). **Opportunity to ensure safety enforced** [sic]**, prior to patient contact** also indicates that there was thought given to safety issues.

The Learner: Analysing and understanding the skill:

Opportunities to evaluate and to reflect could be said to relate to the comment that discussion is promoted and debate and questioning is encouraged, and both were ranked highly. Provision and follow-up of feedback with video and supervision was mentioned as very important. Surprisingly one-to-one support in teaching and encouragement gained minimal support within this group of teachers. Peer support was mentioned.

Teacher traits and Quality of teaching:

The **Creativity, energy, and enthusiasm** of the teacher were included as important qualities and the notion of teacher **credibility** was valued as somewhat important. Teaching a **correct model/demo** was ranked as very important, whilst **acting as a good role model** received much less emphasis. The **clarity of language** was given little significance.

Application (of the skill) to other areas and to practice:

High priority was allocated to knowing the purpose of what was being taught and why and "reality". Other interesting comments included exploring problems that occur in the real world and opportunities to explore skills required in particular settings, perhaps indicating that there was a concern by the teachers that good teaching should involve mastering the skill so this could be adapted and used in various settings (Benner 1984)). This could be understood to be associated to the notion of application to practice. Appreciating breadth, which may be associated with this notion, figured low down on the priority list.

Asssessment and competence:

Planning the complexity of the situation according to the stage of programme is an essential part of the educational experience (Spencer, 2003), however this did not attract votes, although **planning complexity according to the student's prior learning** was included, perhaps suggesting a prioritisation of student over programme when planning teaching. **Methods of assessing level of competence** appeared low on the scale of priority, whilst **standards – what is expected of the student – performance** was higher up the list.

- To know the purpose of what and why teaching clinical skills [9]
- Environment where ok to make mistakes and share fears and concerns [9]
- Opportunities to promote discussion, debate and questioning [9]
- Opportunities to evaluate and reflect [8]
- Both provision and follow up of feedback – client video – supervisor [8]
- Correct model/demo [7]
- Improving dexterity or technical skill prior to pt contact [6]
- Reality [6]
- High quality guidance v available [5]
- Knowing why it is important to the patient [5]
- Enthusiasm/energy [4]
- Creativity of teaching so students see usefulness of the learning [4]
- Confidence on part of learner to take up learning opportunities [4]
- Credibility of teacher e.g. experience [4]
- Linking to theory [4]
- Planning complexity of situation according to student's prior learning [3]
- Breaking the skills down but putting the skill back together [3]
- Opportunities to deconstruct self and others in learning [3]
- Standards – what is expected of the student – performance [3]
- Students should be aware that when performing a skill there is another human being involved [3]
- Opportunity to ensure safety enforced; prior to patient contact [3]
- Establishing a culture of wanting to improve [3]
- Opportunities for safety in practice – with feedback /supervision [2]
- Theory needs to reflect best practice/research EBP [1]
- Sensitivity to language (jargon) so as not to alienate/intimidate [2]
- Maintaining patient/client centeredness [2]
- Exploring problems that occur in real world [2]
- Correct equipment or showing how to adapt equipment [2]
- To act as a good role model [2]
- Methods of assessing level of competence [1]
- 1:1 support in teaching and encouragement [1]
- Learning at an appropriate stage of programme [1]
- Clarity of language
- Appreciating breadth
- Minimising risk to patients
- Planning complexity of situation according to stage of programme
- Opportunities to explore skills required in particular setting
- Peer support

Table: Ranked factors identified as important in the teaching and learning of clinical skills (AM group) - numbers in square brackets represent number of votes

What did the afternoon group feel was important in T&L CS?

Theory

Theory and learning of clinical skills are linked + students being aware of theoretical underpinning [10]

Accuracy of skill/ method

Agreed method that is taught clinically and assessed – correct way to do [7]
(More so an agreed consistent method)
Correct procedure explained in more than one way

Doing

Have the opportunity to repeat the opportunities – repetition [5]
Students given a chance to do skill in safe environment with the opportunity for feedback

Reflection skills

Being able to develop skills in stepping back to reflect (not focussed on student) [5] Develop skills in self appraisal and reflection + goal setting [2]
Reflection with peers [4]

Learner-sensitive

This is a developmental skill [4]
Sequence of what you teach to students (to build up their confidence) includes planning [4]
Readiness to learn [3]

Attitude & Values

Group is non-judgemental, confidential, and supportive learning environment [5]
To look at patient's holistically appreciating the person (+ patient) [3]
Ability to laugh at self, teacher and student [1]
Teacher and student being patient during learning skill [1]
Why students are there bring back to why student needs to learn – get to essence of what students want and what patient wants/goals/wishes

Environment

Time space and materials [1]
Someone to listen to their [students'] insights [1]

That learning reflects real world

Observing clinicians working [5]
Safety for patients [4]
To make skills labs realistic through integration [4]
Help students deal with the complexity of the 'real world'

Summary

Twenty-three points were raised by the seven participants in the afternoon conference workshop. The participants felt the following were important in teaching and learning clinical skills:
The learning and teaching of clinical skills must be linked to theory.as clinical skills are theoretically underpinned, and students need to be aware of this. The skill must be taught according to an agreed method or correct procedure, which reflects which is done clinically and how it is assessed. It is interesting to note that the correct procedure must be *explained* in more than one way (not *demonstrated* or *practised* or *derived from observing* a range of methods/ procedures). Students learn clinical skills by having opportunities to do the skill, and repetition is key for learning. Skill learning is best in a safe environment that provides the space, materials and time, with the opportunity for feedback. A key element of learning clinical skills is talking about them afterwards (reflection) and appraising one's performance, with peers and with clinicians/ teachers. It is important that learning is based or couched in the real world, with students having opportunities to observe clinicians and that lab-based learning is integrated. The position of the learner in relation to the skill is important, especially in readiness to learn, and teachers recognise that skill learning is developmental, requiring good planning to effectively build up student confidence through the sequence of teaching/ learning. Last, but certainly not least, attitudes of the students (group learning) and the teacher are important, and should be patient, non-judgemental, confidential, and supportive, holistic in appreciating the patient, and can also include the ability to laugh at self (teacher and student). Student-centeredness in teaching is important, focusing on why students need to learn, to get to the essence of what students want and what patient wants/goals/wishes.

- Theory and learning of clinical skills are linked + students being aware of theoretical underpinning [10]
- Agreed method that is taught clinically and assessed – correct way to do [7]
- (More so an agreed consistent method)
- Group is non-judgemental, confidential, and supportive learning environment [5]
- Being able to develop skills in stepping back to reflect (not focussed on student) [5]
- Have the opportunity to repeat the opportunities – repetition [5]
- Observing clinician's working [5]
- Safety for patients [5]
- Reflection with peers [5]
- This is a developmental skill [4]
- To make skills labs realistic through integration [4]
- Sequence of w hat you teach to students (to build up their confidence) includes planning [4]
- To look at patient's holistically appreciating the person (+ patient) [3]
- Readiness to learn [3]
- Develop skills in self appraisal and reflection + goal setting [2]
- Someone to listen to their [students'] insights [1]
- Ability to laugh at self, teacher and student [1]
- Time space and materials [1]
- Teacher and student being patient during learning skill [1]
- *Mentioned in first round, but not assigned weight through second round ranking process:*
- Students given a chance to do skill in safe environment with the opportunity for feedback
- To give feedback on how they feel and receive feedback
- Why students are there bring back to why student needs to learn – get to essence of what students want and what patient wants/goals/wishes
- Correct procedure explained in more than one way
- Help students deal with the complexity of the 'real world'

Table: Ranked factors identified as important in the teaching and learning of clinical skills (PM group) – numbers in square brackets represent number of votes

Conclusions

Common ground between groups

Importance of reflection, self appraisal and feedback featured heavily in both groups, as did linking learning with the real world.
Participants and the high value and commitment that they made to sharing their thoughts and experiences with one another and respecting other's approaches. Desire to learn with from and about each other in order to improve their own professional practice

Differences between groups

Despite similar process, the two groups generated very different responses, for example the morning group omitted comments on the importance in linking to underlying theory, whereas this was clearly important for the afternoon participants. Similarly Safety and patient aspects featured heavily in the morning group, but not the afternoon, and practice/repetition featured in the afternoon, but not the morning. These differences may represent the nature of the process, as much as the mix of participants in the group.

Further development / research

These workshops brought out several issues that might warrent further investigation:

- Exploration of the gap in consensus in what is meant by clinical skill & how this affects /contributes to teaching/learning
- The lack of overt reference to established underpinning pedagogical principles of skills learning and teaching may indicate an opportunity for targeted staff development activities.

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