SECTION THREE

CLINICAL TEACHING AND CLINICAL INSTRUCTION GUIDELINES
Section Three

3.1 The idea of the adult learner

The learning and assessment tools contained within the Clinical Workbooks that students will use throughout the clinical program are grounded in the assumption that the students coming to your centres are capable of self-direction and self-assessment.

We have created learning tools and assessment approaches that assume students are adult learners and beginning practitioners. Before we examine the characteristics of effective clinical instruction, teaching and supervision we need to think about the characteristics of the adult learner.

In contrast to children adults as learners need to

- feel that what they learn is relevant;
- be given the opportunity to agree with the goals of the learning experience;
- be provided with a learning environment that fosters self-esteem, allows for freedom of expression and acceptance of difference;
- be actively involved in the learning process;
- be given responsibility for determining the pace of the experience; and
- see progress towards the established goals.

Adults also tend to rely less on memory and more on creating relationships between different forms of knowledge and want to master immediate problems (Ladyshewsky, 1995)

What does this mean for our approach to teaching and supervising the adult learner who is assuming the role of a beginning practitioner? It means that teaching in its broadest sense must give way to facilitating student learning in a supportive environment. Today clinical teaching is more properly seen as the art of facilitation and coaching. Remember how you learned a practical skill? Think how hard it was to get the hang of what you were being shown. Learning a practice is tough work and requires the patient supervision of an interested and caring practitioner. The next section will examine the idea of teaching as facilitation and coaching.

3.2 Teaching as facilitation and coaching

The clinical practice setting, as a forum for teaching, can be quite complex. In their interactions with students it would be true to say that practitioners assume many roles along a continuum from instructor to assessor. Since the seminal work of Donald Schön we understand more clearly the difficulties involved in “teaching” a practice. The more expert the practitioner the more challenging this becomes. Why? Quite simply when a particular level of expertise is reached the relationship the practitioner has with their practice cannot be separated out into chunks of know-how for assimilation by the beginner. So how should we teach a practice?
A beginner needs to be coached to see the practice world through your eyes. The teacher must become the facilitator of student learning. This term suggests an individual who prepares the way, “opens doors” and unobtrusively assists-when-asked or required; providing gentle motivation through competent ‘presence’. This approach requires considerable skill, experience and self-control, but is ideal for allowing and assisting young adult learners to achieve a ‘wholeness’ in their grasp of their professional knowledge and activities.

A purely ‘facilitator’ teaching style may not be appropriate for all students. For example, where a quiet or shy student is unlikely to step forward to ask for assistance and would thus be inadequately motivated by this ‘background presence’. Similarly, some writers have subsumed many of the attributes from the continuum into one all encompassing individual under the title of a ‘coach’. This term conjures us the idea that the aim of the clinical teacher is to develop the individual students’ potential abilities or latent qualities that relate to performance. Alternatively, some ‘coaches’ may interpret their role in terms of acting as an older, knowledgeable mentor. Such a person would have the ability and tough-minded dedication to motivate all of his or her students, by a controlled application of his or her skills, ranging from practical example to sheer force of will, to achieve the level of ‘fitness’, knowledge, deductive reasoning and skill-in-application that they require to succeed in their chosen new profession.

Depending on the student or the moment, there may not be an easily chosen ‘right-way’. However we are of the view that that the style of teaching called quantitative teaching, in which the teacher simply gives out information or tells students what to do fosters surface learning. This may lead to competent recall of facts, but with little real practical understanding of the way the new information ‘fits’ within the student’s global conceptual map for their profession.

Instead, students should regularly be given the opportunity to struggle with the new material as they internalise it, and relate and reconcile what they are learning, with what they know. Before they will accord value to specific informative material and concepts, adult learners need to know why they are incorporating it, where it will contribute to their professional understanding and how they will be able to use it.

In order to foster deeper conceptual learning of the many interlinked issues in the uncertain clinical world of our professional practice, students need to be given plenty of support to grapple with the information within the context for which it was designed. Teaching for this preferred qualitative learning “… requires processes which enable the student to actively construct meaning, largely through interaction with their tutors, their peers, the informative material and the learning environment”.

3.3 Characteristics of effective clinical teaching

Rather than categorise teaching as either good or bad it is more helpful to think about clinical teaching in terms of its effectiveness in facilitating learning.

3.3.1 Examples of positive interaction

- Practitioner integrates question and answer techniques into teaching.
- Combination of one-to-one, small or select group and larger group discussions.
- Interactions occur in a variety of contexts – in the treatment room, with or without a patient, or elsewhere.
- Students empowered and encouraged to initiate interactions.
- Students conceptual understanding (as well as rote knowledge) regularly probed, challenged and enhanced.
- Probing questions, to draw out students level of understanding.
- Individually or grouped, students are pulled into spirited debate, involving why? what? or if? type questions, which require higher order thinking.
- Students who believe they have mastered a given subject are challenged to think even further into the subject or related issues.
- Recap and review sessions, to develop or recognise, foster and acknowledge global understanding.

3.3.2 Examples of negative interaction

- Excessive emphasis on factual recall.
- Excessive tutor-talk stifles a student’s ability to test understanding through discussion.
- Limited probing and/or interaction.
- Tutor exercises insufficient active listening skills.
- Too much information and detail in one session.
- Too many one-to-one discussions.
• Not enough group discussion, some individuals singled out (positively or negatively) while others may be neglected.

• Physical separation for one-to-one discussions stifling the possibility of group involvement. Although, at times, such a course is necessary or at least prudent to avoid embarrassment.

### 3.4 Designing an ideal adult learning clinical experience

The experiential model of learning and the novice to expert model of clinical skill development were described in the previous section. In particular we described a Method for learning from Direct Observation:

Keeping in mind this method the following teaching/instructional design is suggested for the beginning practitioner once they have mastered their initial examination:

**Stage 1:** Prior briefing during which the task and its difficulties are discussed and the clinical supervisor assesses what the beginner knows about the particular examination.

**Stage 2:** Concrete clinical experience in which:

1. the supervisor/expert practitioner will model the appropriate activity; and
2. the supervisor/expert allows the beginner to emulate the approach

**Stage 3:** Application phase beginners are provided with a similar activity and the opportunity to apply the skills developed in the first case.

**Stage 4:** Debriefing phase beginners explore with the supervisor their strengths and weaknesses. This phase provides the parties with the opportunity to develop a clinical action plan to facilitate the further clinical skill development of the beginner as he or she moves along the continuum from beginner to expert practitioner.

The creation of an “ideal” adult learning experience is one element in the teaching and learning equation. Supervisors must also learn how to effectively teach someone a new skill.

### 3.5 Criteria for effective instruction

How can we determine the effectiveness of our instructional approach? Best and Rose, (1995) suggest the following criteria:

• clarity of speech;
• appropriate to the beginner’s level;
• responsive to cues from the beginner;
• provides encouragement;
Section Three

- demonstrates flexibility;
- logical sequencing;
- body language and verbal instruction match;
- provides a demonstration; and
- allows permission for clarification.

3.6 Ways of improving instructional skills

The quality of student learning is shaped by the approach taken by practitioners to the task of passing on their knowledge and skills to beginners. We can always improve our instructional and teaching approaches. We suggest at this point you might care to respond to the following questions.

- What sort of questioning technique do you use? Open versus closed ended questions.
- How much time do you spend talking – do you let the beginner explain their needs to you?
- What tone of voice do you use?
- Do you hide your lack of understanding beneath jargon.
- What do you do when the beginner cannot answer the question? Do you direct them to do some reading? Do you tell them the answer? Or do you find other ways to assist them to solve the problem? (adapted from Best and Rose, 1995)

3.7 How to be an effective clinical tutor/supervisor

Plan reflectively: Try not to leave anything to chance (may be unavoidable), review and revise your approaches and styles regularly. Nominate others – recognise and use your human resources: Effectively spreads workload, specific expertise/knowledge, broader/richer range of experience for students, but give clear guidance (to both student and supervisor).

Use the Learning Contracts to remind yourself what needs to be achieved during the student’s attachment. Within each ‘teaching event’, be realistic, sequence progress into manageable chunks, based on time, duration and number/seniority of students, always incorporate an assessment of the students prior knowledge. Use feedback with/from students. Modify as appropriate. Set a good example: You (and your designated colleagues) are a role model for the profession, demonstrate your experience in action by performing quality examinations, be wary of the use of short-cuts or the adaptation of a “good enough” approach to patient interactions. Involve the students in an active participatory process. Fully observe them in all aspects, to identify and correct any problems. Be sympathetic and supportive, especially with junior students. Again use the contracts to negotiate with the student to vary the level of support as they progress.

An awareness of such a list of activities can at first be alarming. However, every clinical supervisor will have recognised most, if not all, of these elements from their memories of their day-to-day interactions with their students, interns and younger qualified peers. Reflective recognition of these
and perhaps other functions, can promote a more focussed approach to the quality of the time spent with your students.

For further information please refer to the 2009 Faculty publication: **Practical Guide for Clinical Educators**. This publication comprises 4 topics:

1. Planning teaching sessions
2. Teaching small groups
3. Giving effective feedback (including a DVD Giving Feedback which is not available on the web link), and
4. Assessment in the clinical setting.

Each topic is structured to:

- Introduce practitioners to the objectives and content
- Build on their existing knowledge and previous experience
- Provide realistic case scenarios that illustrate the key learning points in the topic, and
- Identify further relevant reading or other resources.

This publication is available is provided as a separate PDF located in the same place as the Guidelines on our Home Page

### 3.8 The voices of our students: DVD clips featuring advice from students regarding teaching, learning and feedback

At the end of 2011 we invited interested students to share with us their experiences around clinical teaching and learning. These clips can be viewed by following the links which are provide in the same location as you accessed these Guidelines on our Home Page

### 3.9 More than teaching

The role played by radiographers and sonographers when attempting to impart a wide range of professional facts, interpretations and behaviours to young adults is difficult to fully categorise in print. In fact you will be doing more than teaching during those interactions with students. During interactions with students, radiographers impart knowledge, promote skill development and promote professionalism and facilitate the development by students of a professional identity.

#### 3.9.1 The getting of wisdom – ways of imparting knowledge

- Help students to identify what he or she does/doesn’t know.
- Focus on literature appropriate to practice.
Section Three

- Encourage students to regard printed course work as a crucial resource.
- Bring knowledge/experience to relate to general theory for specific cases.
- Help students to achieve a holistic view of the patient.
- Bridge the gap between classroom and clinic.
- Learn from your students – encourage them to bring new knowledge into your sphere of patient assessment and treatment.
- Be aware of the progress and demands of the whole curriculum.
- Encourage reflection – through and on practice.

3.9.2 Becoming a member of the profession: Promoting professionalism

- Maintain, model, explain and ensure continuing standards of professional practice.
- Check and review plans.
- Empower a controlled progression toward independent decision making.
- Explore the students attitudes to people in the clinical situation.

Reference

3.10 The idea of a reflective practitioner

In section 2.2 we described the Monash approach to structuring clinical learning. The Learning Contracts for Professional Development are aimed at facilitating the professional development of students especially in relation to assisting them to integrate science with practical know-how and in developing their reflective capacities. To become professional practitioners, students need to learn how to become skilled at thinking about what they do during the “hot” action of clinical practice and afterwards in quieter moments when they can “mull” over what they did and saw and begin to make links between the various cases they complete. Through an active engagement in a range of reflective exercises they will see how each examination they complete will add to their store of radiographic and clinical knowledge and overall professional repertoire. What do we mean by the term reflective practitioner? What for that matter do we mean by the term “reflection”? The next section is an extract from a chapter written about these matters by Marilyn Baird and Jane Winter. See Chapter Seven in the book: Rose, M., & Best, D. (eds) (2005) *Transforming practice through clinical education, professional supervision and mentoring*. Churchill Livingstone, Edinburgh.

Characteristics of a reflective practitioner

In the following extract from a first year radiography student critical learning experience report, we are introduced to the kind of approach to patient care that is a consequence of an habitual approach to practice that appears to lack any engagement in reflective thinking on the part of Radiographer A.
... Radiographer A did not communicate with patients well. The radiographer routinely takes patients to the room and immediately directs them to assume a position. There is no attempt to build rapport through smiling or even asking how the patient is. The only communication was one-sided: the radiographer giving the patient directions. There was no general conversation with patients unless the patient spoke first. From my perspective I took the behaviour to imply the radiographer lacked a real concern for the patient simply wishing to get the job done as quickly as possible. Radiographer B was the complete opposite. This practitioner has a genuine concern for patients and treats them as individuals not just another “hand x-ray”. I saw this radiographer build rapport from the moment of greeting the patient. This was done by forming eye contact, smiling and saying: “Hi my name is ...”. Throughout the examination I noted the radiographer being kind, polite and showing empathy. The radiographer chatted about general topics and often stood by the table and talked to the patient without setting up equipment so eye contact could be made and genuine interest shown. Whilst communication does not alter the quality of the images and it might slightly increase the examination time, when performed well, the total experience is pleasant for the patient and satisfying for the radiographer

(2003 first year radiography student following completion of a 4-week clinical rotation)

There is little doubt the student believed the patient was better served by practitioner B. In contrast to practitioner A, practitioner B is a thoughtful radiographer who has gone beyond a focus upon the technical aspect of his or her work. Radiographer B is demonstrating a concern with the ethical and moral dimensions of practice as well as “contextual”, “interpersonal” and “integrative” competence (Johnston, 1995). Yet can we ascribe to the actions of this radiographer the label of reflective practitioner?

Certainly radiographer B has taken the first step in the process envisaged by Dewey (1933), by making a conscious decision to direct his or her actions in an “intelligent” and “creative” way. This practitioner seems to have the particular attitudes of mind that Dewey (1933) believed are a precursor to reflective thinking, namely:

- “open-mindedness”;
- “whole-heartedness”; and
- “responsibility”.

It is only when these attitudes are embraced, can practitioners could engage in that form of thinking that frees them from “impulsive” or “taken-for-granted” and habitual approaches to their practice. What kind of thinking are we talking about? Fish & Twinn (1997) argue the reflective practitioner actually moves beyond the “commonsense view” that practitioners should think about their actions during and after the delivery of a professional service. Reflective thinking is not idle navel gazing and imagining how practice could be different (Bolton, 2001). Reflective thinking is deliberative orderly (Wales, et al., 1993). Furthermore, it is not a self-absorbed process that solely focuses upon self-reflection and self-monitoring without seeking feedback from colleagues (Bolton, 2001).

Reflective thinking is a serious intellectual activity that means taking a step back either before, during or after we act with a view to improvement or change. Engagement in reflective thinking means a commitment to a structured and critical review of one’s practice leading to refinement and new understandings (Fish & Twinn, 1997).
Section Three

Thus, in contrast to habitual or conformist practitioners, reflective practitioners:

• have the capacity to be open to new ideas and approaches to practice;

• seek to improve the quality of their work for the benefit of the patient;

• are enthusiastic and passionate about their work;

• see what they do as worthwhile and meaningful;

• act in an intellectually and morally responsible manner recognising the role values and beliefs play in shaping the quality of patient care;

• adopt a problem solving and holistic approach to their practice seeking collaborative solutions to practical workplace issues and concerns;

• acknowledge their limitations and level of competence; and

• know how to engage in a critical conversation with their practice and their inner self and in the process gain new knowledge and insight into the meaning of their practice.

The reflective practitioner is unashamedly “enticed and engaged by thinking” (Loughran, 1996, p.5) always wanting to know why something is worth believing. Such practitioners openly question and possibly challenge the dominant institutional, political and economic imperatives that intrude upon practice and in the process seek to mitigate their impact upon the delivery of quality patient care (Smyth, 1986; Bolton, 2001).

References