



MONASH University

M8Alliance

Medicine, Nursing and Health Sciences

Practical Guide for Clinical Educators

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Monash University
Faculty of Medicine, Nursing and Health Sciences
Practical Guide for Clinical Educators

This self-directed package was developed as a collaborative venture by staff from the Monash University Gippsland Medical School, the School of Nursing and Midwifery and the Centre for Medical and Health Sciences Education (replaced by a new entity in 2011 called HealthPEER (Health Professions Education and Educational Research) and supported by Faculty funding.

The four topics in this package were originally designed to assist clinicians who engage with Faculty medical, nursing and health science students in the clinical areas. The booklet contains four topics and a DVD that are designed to stand alone, or be undertaken as part of a complete package.

You may be new to clinical education or you may have been involved in teaching and assessing students in clinical settings for some time. These topics were designed so that everyone who provides clinical supervision, teaching or tutoring to either medical, nursing or health science students can develop an understanding of the basic principles of education as they apply in a health setting.

The topics in the package include:

1. Planning teaching sessions
2. Teaching small groups
3. Giving effective feedback (including a DVD Giving Feedback), and
4. Assessment in the clinical setting.

Each topic is structured to:

- Introduce you to the objectives and content
- Build on your 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.

We hope that you find these resources valuable.

For any further information regarding teaching and learning issues please contact:

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Planning teaching sessions



Topic 1

Planning teaching sessions

This topic introduces the core components of a teaching plan and the process for developing a plan for your own teaching. The principles you will learn in this topic are also applicable more generally to talks and presentations.

Dr Geoff White (Previously Centre for Medical & Health Sciences Education). Currently Course Leader Master of Teaching (Secondary) Faculty of Education, Monash University

Topic Objectives

This topic will provide you with the opportunity to:

- Reflect on your own method of planning your teaching sessions;
- Identify the key elements of a formal teaching plan;
- Apply the key elements in the planning of your own teaching.

Key Definitions

Teacher goals

Concise statements of your rationale and/or purposes for the teaching session.

Behavioural learning objective

A concise statement of what a learner will be able to DO if s/he has successfully understood a specific idea or skill.

Why should you plan your teaching?

The realities of clinical workplaces often mean we engage in teaching without the benefit of much (if any) planning, relying instead on our clinical knowledge and expertise. A planned teaching session will, however, maximise the learning opportunities for your students and help you feel more in control of the whole exercise. A plan is a roadmap for you and your learners to follow and will help you pick up the session's threads if you decide to follow a 'side road' of discussion raised by a student.

So, planning means greater confidence and security for you and improved learning experiences for the students.

Reflective Activity

Have you ever planned a teaching session?

If YES, was it helpful to both you and your learners? In what ways? How could it have been improved?

If NO, what would be your first step in planning a teaching session?

General principles of planning a teaching session

Tina has been nursing for 11 years but has only recently agreed to become involved in the teaching of undergraduate nurses in her unit. Tina hasn't taught undergrads before, at least not in any serious planned way, so she's feeling a bit apprehensive about how to prepare for her first teaching session. A colleague who's been teaching for two years suggested Tina jot down some points about what she wants to say and what she wants the students to learn.

After doing this during her meal break, Tina had a teaching plan that was a mixture of dot points and something a bit like an actor's script for what she planned to say.



Have you ever planned a teaching session? If so, what did it look like – what was its format and what details did you include? If you haven't planned a session, talk to someone who has about these two questions.

Although there are many ways of presenting a teaching plan and it is a matter of finding which one suits you best, all plans are variations of the WHAT and HOW structure:

- 'What' refers to the content you plan to cover;
- 'How' refers to both what the students and you will do during the lesson.

The teaching sequence usually has three components starting with the SET (introduction), BODY (bulk of the session) and CLOSURE.

When using the SET, BODY, CLOSURE format it is essential you:

- Express your content as behavioural objectives rather than simply as a list of ideas you plan to cover;
- Plan the student activities first, THEN think about what you, as the teacher, will be doing. This will ensure you end up with a lesson that is engaging for the students;
- Ensure the SET links the students back to the previous lesson(s) and the CLOSURE sets up connections with the lesson that will follow.

Whichever format you choose, the effectiveness of your teaching plans will be maximised if you also ensure the following aspects are included:

1. TEACHER GOALS (in **general** terms what **you** hope to achieve in the session)
2. ASSUMED STUDENT BACKGROUND KNOWLEDGE AND EXPERIENCE
3. STUDENT LEARNING OBJECTIVES (see below)
4. EQUIPMENT, TEACHING AIDS ETC.
5. KEY QUESTIONS (Qs you plan to ask which address the learning objectives)
6. MAJOR DIFFICULTIES ANTICIPATED
7. EVALUATION OF LEARNING (How do you know if your objectives have been achieved?)

8. SELF-EVALUATION

Teacher goals

Teachers normally have one or more purposes for teaching a particular lesson. Whilst there will always be at least one that focuses on the students' learning, it is acceptable to have one or more that are about yourself as the teacher. For example, a teacher goal for yourself as the teacher might be: *To better manage the chatterers in the group.*

On the other hand, a teacher goal about **student learning** might be: *To introduce the sequence of skills in setting up an IVAC infusion pump.*

It is absolutely essential teacher goals are not confused with student learning objectives. Student learning objectives are specific statements of intended outcome for the **students' learning**, teacher goals are about you as the teacher.



Think about something you've taught recently or will be teaching in the near future. Write one Teacher Goal for yourself and one that is student-oriented.

Learning objectives or learning outcomes?

This guide uses the term *learning outcomes* to refer to the intended changes in a learner that flow from a learning experience. The guide does, however, recommend the expression of learning outcomes in terms of the learner's behaviours.

Behavioural student learning objectives

Unfortunately, when it comes to teaching concepts rather than skills, teachers don't possess in-built 'understandometers' with which to see inside learners' minds, so we need to create situations in which the students do observable things that are evidence of their learning. This means we need to make student **behaviour** the focus of our student learning objectives.

One way of expressing your objectives for the students' learning is to ask: What will the students be able to **DO** if they have understood the lesson's content? In other words, how could they show me they have understood? Your answer to this question then defines:

- what you want them to learn;
- what activities they will be experiencing during the lesson;
- what you as the teacher will be looking for in order to evaluate the learning in your classroom.

It is worth noting that there are some things we would like students to learn that do not involve easily observable behaviours. For example, we may desire them to develop an increased appreciation of the socio-economic influences on patient health yet it is challenging to identify what students could DO to prove they have achieved that outcome?

Rather than ignore such intended outcomes, some teachers prefer to include them as teacher goals rather than student learning objectives.

A teaching plan format

To commence your teaching plan, create a table in WORD™ with three sections similar to the one below:

Lesson components	Learners' activities	Teacher's activities
Set		
Body		
Closure		

The SET

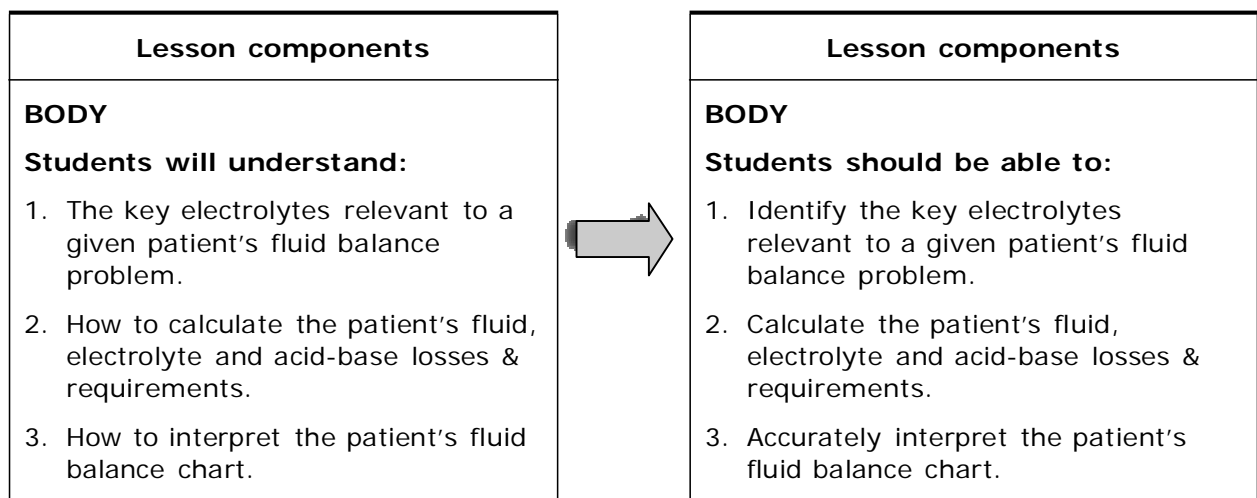
The Set should include brief statements concerning how you plan to:

- establish an appropriate mood or climate for the teaching session;
- motivate your students to learn;
- link this session to the one preceding it;
- explain the usefulness of the session's content;
- introduce the content;
- establish the students' background knowledge and experience;
- clearly present the session's learning objectives to the students.

The BODY

The Body is where the lesson's content is set out as student learning objectives.

Tina's first attempt at a more structured plan included learning objectives that seemed OK when she wrote them down, but when a more experienced teaching colleague asked how Tina would know if the objectives were being met by the students, she realised they needed improvement. By specifying an observable behaviour for each objective, Tina was now confident she could determine the extent of learning within her student group.



In using behavioural objectives Tina had actually achieved a bonus – rather than having to separately plan activities for the students, she realised this step had been automatically covered when she chose to express their learning objectives in terms of their activities!

REMINDER:

Tina's objectives use the verbs *identify*, *calculate* and *accurately interpret*. Expressing student learning objectives as 'Students will understand

should be avoided as understanding cannot be directly observed (remember the 'understandometer?'). Only use objectives that include verbs such as the ones on the next page.

Verbs for use in writing behavioural objectives

At the end of this lesson/lecture/tutorial/module etc. students should be able to....

<p>LEVEL 1 Simple behavioural outcomes</p>	<p>LEVEL 2 Behaviour requiring application of more complex mental operations</p>	<p>LEVEL 3 Behaviour showing student has firm grasp of major concepts or displays original thought</p>
<ul style="list-style-type: none"> • find • gather data • investigate • describe • make • do • compute • measure • prepare • manipulate equipment • use • recognise • examine • identify • recognise and cite evidence for • classify • illustrate 	<ul style="list-style-type: none"> • prove • organise data • analyse • apply • distinguish between • construct • devise a method • plot a graph • state a problem • identify the variables • contrast • compare • specify limitations & assumptions • suggest • differentiate • relate • discriminate • reformulate • justify • estimate • interpret 	<ul style="list-style-type: none"> • generalise from data • synthesise • infer • discuss critically • predict • deduce • integrate • propose reasons & defend them • formulate hypotheses • reorganise • discover • manipulate ideas

Now that we have stated what we want the students to learn, we can move onto the middle column – the learners' activities:

Learners' activities

Lesson components	Learners' activities	Teacher's activities
<p>Body</p> <p>Students should be able to:</p> <ol style="list-style-type: none"> 1. Identify the key electrolytes relevant to a given patient's fluid balance problem. 2. Calculate the patient's fluid, electrolyte and acid-base losses & requirements. 3. Accurately interpret the patient's fluid balance chart. 	<ul style="list-style-type: none"> ▪ Individually list their predictions of the patient's key electrolytes. ▪ Discuss their predictions with their neighbour. ▪ Listen to the teacher's discussion. ▪ Individually complete the appropriate calculations. ▪ Listen to teacher's explanation. ▪ Provide an individual interpretation when asked. 	

Finally, we can think about what the teacher will be doing:

Lesson components	Learners' activities	Teacher's activities
<p>Body</p> <p>Students should be able to:</p> <ol style="list-style-type: none"> 1. Identify the key electrolytes relevant to a given patient's fluid balance problem. 2. Calculate the patient's fluid, electrolyte and acid-base losses & requirements. 3. Accurately interpret the patient's fluid balance chart. 	<ul style="list-style-type: none"> ▪ Individually list their predictions of the patient's key electrolytes. ▪ Discuss their predictions with their neighbour. ▪ Listen to the teacher's discussion. ▪ Individually complete the appropriate calculations. ▪ Listen to teacher's explanation. ▪ Provide an individual interpretation when asked. 	<p>Build on what was learned from the Set about the students' background knowledge by:</p> <ul style="list-style-type: none"> ▪ Ask key questions related to each of the learning objectives. ▪ Direct students to think about the questions as individuals and then to discuss their thinking with their neighbour. ▪ Explain how to calculate a patient's fluid, electrolyte and acid-base requirements. ▪ Check that each student can successfully complete the calculations. ▪ Ask two students to interpret the patient's fluid balance chart. Asking for any additional comments from the group.

NOTE

As we move from left to right across the plan we can see the logical sequence from learning objectives \Rightarrow learner activity \Rightarrow teacher activity.

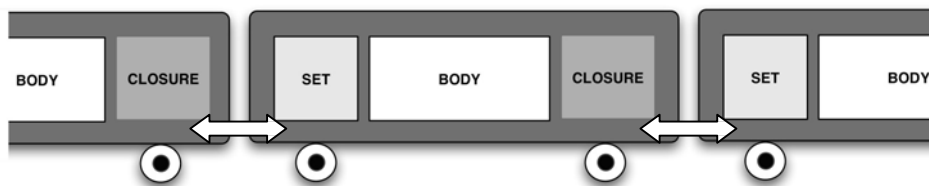
The same planning principle applies whether we are teaching 1:1, 1:5 or 1:500.

The CLOSURE

A poorly planned lesson will often result in the Closure component being omitted due to lack of time. The Closure is, however, very important as it is your last opportunity to check the students' understanding, summarise by referring back to the lesson's objectives and linking to the next lesson in the sequence. Don't introduce any new material during this phase.

The importance of linking sequential lessons

Given all that's happening in our learners' lives, we need to help them link a lesson's content to what has gone before and what is yet to come. We can't assume the learners will automatically do this, so spelling it out for them is important. In reality, a lesson that is part of a sequence of related lessons is like a carriage in a train - unless they are linked, only the engine moves forward. So make sure your Set links back and your Closure looks forward.



Key questions

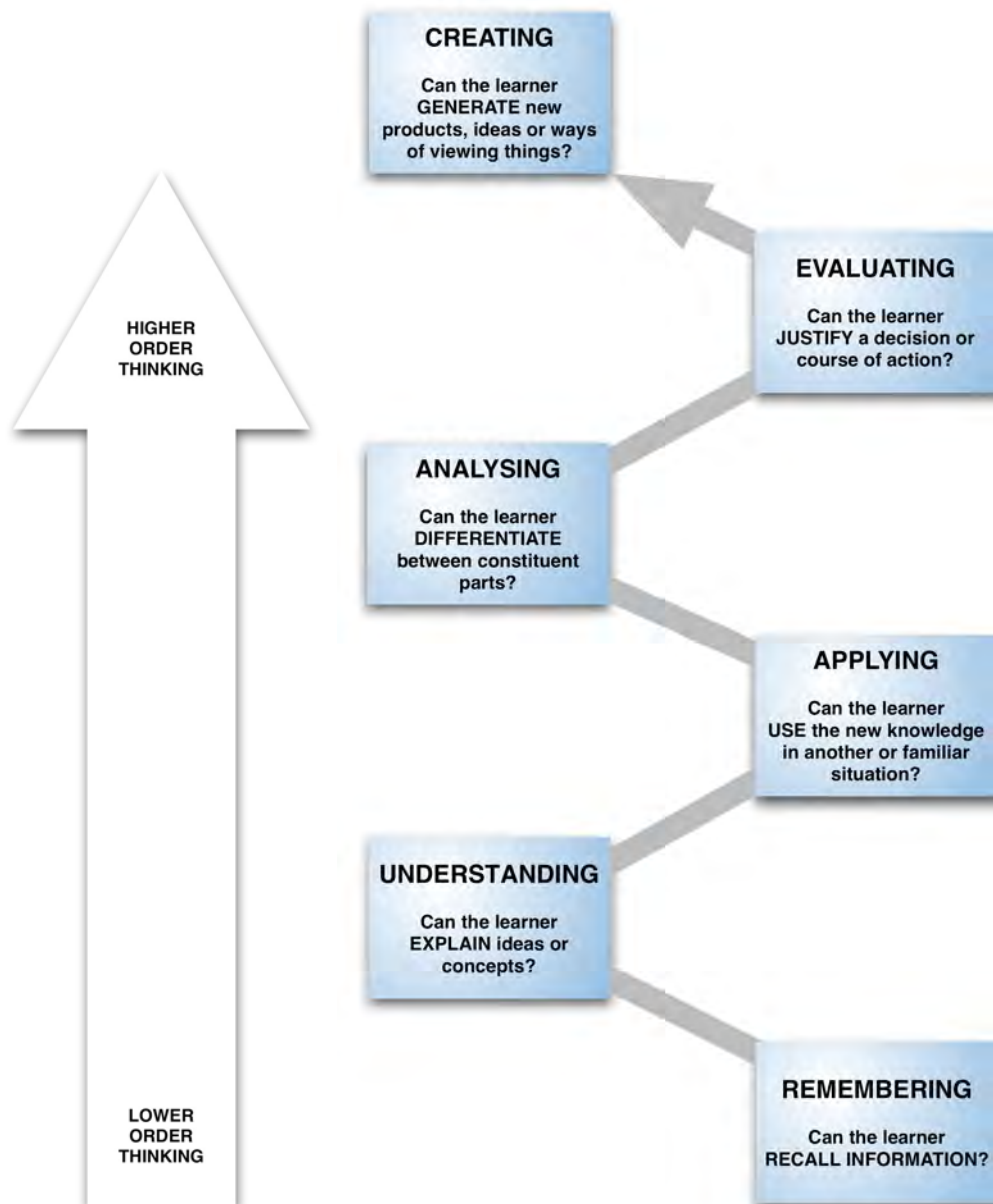
Questioning is the most effective method for both promoting learning and checking on what is actually being learned (as opposed to what is being taught). *Key questions* are focused upon the session's learning objectives, so they should be planned in advance rather than formed and delivered 'off the cuff'.

See **Planning your questions** (p11) for further details.

Planning for levels of thinking

You might have noticed that the table of verbs on page 6 shows three levels of complexity. A similar grading of complexity can be used with our students' thinking and, in particular, the kinds of mental activity you plan for your students. The person most commonly associated with levels of thinking is Benjamin Bloom who introduced his six categories of thinking in the 1950s, and they continue to be influential with teachers to this day.

Bloom identified six thinking categories, with factual recall ('Sale of the Century' thinking) being the lowest level and creative thinking the highest. Despite the fact that educationists have debated for 50 years the differences between the six levels and various alternative names for the levels have been proposed, Bloom's ideas have always been recognised by teachers as really helpful planning aids. Here is a brief introduction to Bloom's levels of thinking:



An example of these six levels of thinking is provided below:

Transplantation –an introduction to the issues

CREATING

Translatable organs are in very short supply: Organise a creative campaign to promote donation. The campaign must be based on your research of factors influencing the decision to become a donor.

EVALUATING

Do you think everyone should be presumed to have given their consent for organ removal OR should consent still be obtained in advance? Support your opinion with at least three sound arguments.

ANALYSING

It costs \$30 000 to maintain someone on dialysis for one year. A transplant costs a similar amount: When would each of the procedures be the best option?

APPLYING

Suppose you are a transplant candidate waiting for a kidney: Predict the criteria that would be used to decide whether or not you would be the recipient of the next available organ.

UNDERSTANDING

Provide at least three examples of a situation in which an organ transplant might be the only solution to serious medical problem.

REMEMBERING

Write the dictionary definitions of: transplant, organ, donor & recipient

The levels of thinking are very useful guides for planning our objectives and key questions. For example, observational studies of classrooms have repeatedly found the majority of teachers' questions are directed at the lowest level, recall, so when planning our questions, we should try to ensure they cover a variety of levels.

Similarly for your objectives – are they all focussed on the lower levels or is there a spread?

NOTE: We are not suggesting every one of the six levels should be addressed in every teaching session or even across a number of sessions. Rather, we are recommending that you ensure your focus is not predominantly upon any one level to the exclusion of the others. Some teachers simply talk about 'lower order thinking' and 'higher order thinking', thereby separating the six levels into two helpful groups.

Planning your questions

Teachers routinely ask lots of questions during a class and even though many of these are management-oriented (e.g. Who has the handouts? etc) the content-related questions allow the teacher to evaluate the nature and extent of learning. In particular, questions that target the session's learning objectives will provide the teacher with quite reliable feedback on the students' learning. Questions can also have powerful effects on the students' learning by developing their understanding and helping them monitor their own learning.

In addition to the evaluative and management purposes outlined above, three further uses of questioning are:

- to stimulate interest in a topic;
- to orient students' thinking to the topic;
- to share and clarify understanding;

Questions can:

- be broadcast to the whole group/class;
- be focused on a particular learner;
- have only one correct answer;
- have more than one correct answer;
- address be pitched at all the levels of thinking (see Bloom).

Putting it all together

Tina's plan is really starting to take shape as it now has three phases, Set, Body and Closure and two activity components focussing on the Learners and the Teacher. She has listed her Teacher Goals, the background knowledge she is assuming the students will bring to the session, the content and management problems she can anticipate occurring and the equipment and materials she'll need.

Now she returns to her plan to ensure she has promoted active learning, to finalise her key questions (the ones she'll use to evaluate the learning that has occurred) and, finally, to check that she is consciously planning to create an effective learning environment.

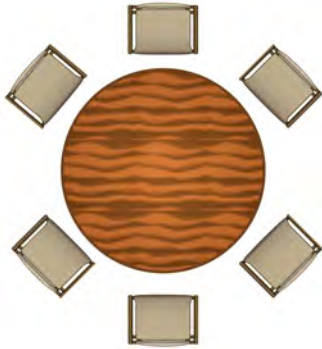
Using the teaching plan below, indicate how you would:



- use the SET to promote your class as a safe and supportive place to learn;
- **state** your key questions that will help you evaluate the students' achievement of the learning objectives;
- modify the learners' activities so that they promote active learning, engagement and challenge;
- modify both the learners' and teacher's activities so that they are meaningful for students whose first language is not English. Repeat for the visual learners.

Lesson components	Learners' activities	Teacher's activities
Set		
<p>Body</p> <p>Students should be able to:</p> <ol style="list-style-type: none"> 1. Identify the key electrolytes relevant to a given patient's fluid balance problem. 2. Calculate the patient's fluid, electrolyte and acid-base losses & requirements. 3. Accurately interpret the patient's fluid balance chart. 	<ul style="list-style-type: none"> ▪ Individually list their predictions of the patient's key electrolytes. ▪ Discuss their predictions with their neighbour. ▪ Listen to the teacher's discussion. ▪ Individually complete the appropriate calculations. ▪ Listen to teacher's explanation. ▪ Provide an individual interpretation when asked. 	<p>Build on what was learned from the Set about the students' background knowledge by:</p> <ul style="list-style-type: none"> ▪ Ask key questions related to each of the learning objectives. ▪ Direct students to think about the questions as individuals and then to discuss their thinking with their neighbour. ▪ Explain how to calculate a patient's fluid, electrolyte and acid-base requirements. ▪ Check that each student can successfully complete the calculations. ▪ Ask two students to interpret the patient's fluid balance chart. Asking for any additional comments from the group.
Closure		

Teaching small groups



Topic 2

Teaching small groups

This topic introduces the core skills required for working with small groups of learners.

Dr Geoff White

Topic Objectives

This topic will provide you with the opportunity to:

- Reflect on your own experiences of working with learners in small groups;
- Identify strategies for working with small groups;
- Apply the strategies to specific teaching situations.

Key Definition

What is a small group?

- The term 'small group' can include pairs through to groups of around twelve. The ideal small learning group is comprised of seven or eight members.

Why teach small groups?

The choice of teaching approaches available to us ranges from teacher-centred lecturing through to more student-centred individual and small group approaches. This range is not primarily about the role of the teacher - more fundamentally it is about the learner's role. Is the learner regarded as a passive absorber of information - a 'sponge'? Or is the learner seen to be more actively involved in creating her/his own understanding?

Both educational research and the experience of everyday teaching and learning have revealed the power of interaction with others as an influence on learning. A learner's understanding is significantly developed when they can compare, contrast and refine their individual understanding with those of others. This view of learning should be seen in stark contrast with those that see the learner as simply an individual consumer of information. When working well, small groups have the potential to develop the understanding of all the group's individual members.

Group learning is also in keeping with the teamwork culture by allowing the group to take some control of the learning processes and outcomes.

Reflective Activity

Think of a time when you taught or learned in a small group setting:

Was it a positive and productive experience?

What did you learn from this experience about teaching small groups?

What is a small group?

Killen (2007) identifies the key characteristic of small group learning as being the students' engagement with learning activities without direct intervention by the teacher, at least for some of the time. Although the term 'small group' can be applied to a group of two, the educational value is maximised if the group is comprised of around eight members. This is not an absolute rule and the optimum number can vary according to the students themselves, the learning context and the content and objectives. Education and training research supports the view that the optimum group size lies somewhere between five and ten members. In general though, a small group is more vulnerable to the absence of a group member or to a member who is in some other way problematic. If the group is too large or too small, the members' collective knowledge and experience can be diluted, limited or lost and the dynamics between members are more difficult to monitor and manage.

Small groups can be run in parallel with a traditional lecture-based program, as a part of traditional tutorial classes or as the primary mode of learning with supplementation from more traditional sources such as lectures and self-directed learning. As with most things educational, a single 'right' way to use small groups simply does not exist, but there are strategies we know to be helpful. McCrorie (2006) emphasises that a group's learning activities are more important influences on quality learning than the size of the group.

Grouping strategies



Tina's first students arrive in a group of five. Every Wednesday afternoon is allocated to working with them as a small group in a room that comfortably seats 15. Tina is unsure how to organise the seating, especially where she herself will sit.

In your experience, how would you organise the seating for the Wednesday session?

If you are working with only one small group you should seat yourself within the group rather than outside it. If you are working with a larger class that is comprised of small groups, seat yourself so as to be as much a part of the whole class as is possible. This will often mean seating yourself at a visual focal point in the room. Positioning yourself in this way says to the students that you, as the facilitator, are involved with them in their learning.

Ensure all group members are in eye contact with each other. 'Outliers' who choose to move their chair so as to be outside the eye contact range should be encouraged to move within range.

The tutor's role



Having not worked with a small group before, Tina's a bit anxious about her role in the small group setting. Is she the 'instructor' - someone who tells the students the stuff they need to know? Or is she meant to sit outside the group and only chip in when she thinks they are going off-track? Or perhaps she's meant to just chair the session - 'oiling the discussion cogs' and keeping the discussion orderly?

In the absence of advice from anyone else about the tutor's role, what role do you think would be the most comfortable or natural for you as a small group tutor?

In the ideal world, someone would advise Tina on the role or roles expected of her. But what is the potential range of tutor roles available to her? Rudduck (1979) suggests four tutor roles and McCrorie (2006) adds a fifth:

- Instructor – conveys information to the students;
- Neutral chair – chairs the discussion but avoids expressing opinions;
- Devil's advocate – deliberately provokes discussion;
- Consultant – independent of the group but available for questions from the group;
- Facilitator – "... similar to the neutral chair, but with more of a guiding role, e.g. asking the group open-ended questions to facilitate their progress with the task in hand. The facilitator need not be the chair of the group – this role might fall to a student." (McCrorie, p. 8)



Which of these roles do you feel comfortable with? Why?

Which roles would you avoid? Why?

If Tina felt comfortable with two or more of these roles, it would be fine to use them strategically in the one session, unless she was directed not to. For example, PBL is a small group approach in which the tutor is generally **not** expected to provide answers to students' questions, instead encouraging them to source the answers themselves.

Helping the group members to work well together

It's Wednesday afternoon and the students will be arriving in five minutes for Tina's first session with the group. Tina has been told by the university course coordinator that the students will be debriefing their clinical experiences since arriving on Monday and then working on a case-based learning activity around childhood asthma that she will facilitate. She knows she'll have to make sure they all know each other's names and she'll introduce herself too, but beyond that she'll be playing it by ear.



After organising the seating and doing the introductions, what else could Tina do to aid the students' engagement with the case? List these activities in sequence, from the point at which the introductions have been concluded.

Killen (2007) observes that "... perhaps the most common reason that small-group work does not always produce the learning outcomes that it should is that teachers approach it too casually and do not prepare their students adequately for learning in this way" (p. 158). Clearly, the roles of 'tutor' and 'student' need to be considered by both parties before embarking upon group work activities.

THE TUTOR

Each of the five tutor roles listed above share some core tutor activities. The extent to which each is used will vary, of course, from role to role and group to group. These core tutor activities include:

- Creating an effective learning environment
- Starting and closing discussion
- Focused listening
- Conversation tracking
- Questioning
- Providing feedback
- Reinforcing
- Summarising
- Responding to group dynamics (the nature and extent of this will vary according to the level of overall responsibility that is required of the group members)

This is not an exhaustive list - no doubt there are some other activities you would regard as central to the tutor role and perhaps some you would see as inappropriate for particular curriculum approaches, for example some versions of PBL.

THE GROUP

Tuckman (1965), Mulholland (1994) and Walton (1997) have identified four stages of group development:

1. Forming – group members get to know one another;
2. Norming – members negotiate the ground rules for the group's operations;
3. Storming – members explore the role(s) each person feels most comfortable with;
4. Performing – ideally, the group dynamics have settled and it is able to function productively.

In relation to the Storming stage it is worth noting that the differences within a group might relate to leadership, willingness to kick off a discussion, ability to sense other members' emotional states, ability to calm disputes, keeping summaries of key ideas on the whiteboard, capacity to ask questions that move the group forward etc.

The following section provides some advice about how to aid small groups in moving through these stages.

Group work difficulties

Well, they're here! Tina welcomed the students as they arrived, asked them to take a seat around the table and then took a deep breath before proceeding. Taking turns, the students briefly introduced themselves and then Tina asked them to open their study guides to the asthma case and spend five minutes reading it through. She wasn't quite sure how to kick off the discussion but one of the group members, Voula, jumped in anyway and the time flew by. It seemed no time at all before the 60 minute session was over but as Tina walked back to the ward she had a nagging worry about the two group members, Maria and Tim, who hadn't said a word for most of the discussion. Should she have stepped in when Voula made mildly sarcastic responses to Maria and Tim's only contributions early in the session? Clearly, English wasn't Rani's first language, so could she have helped him feel more included?



First impressions can be powerful impressions. Was there anything Tina could have planned to do that would have minimised the likelihood of the group's problems arising?

Difficulties may occasionally arise within a group, so the tutor's challenge is to develop a range of strategies to:

- minimise these occurring in the first place (pro-active planning);
- monitor group interactions for the early stages of any problems;
- respond appropriately whilst maintaining a reasonable commitment to the principle of students being responsible for their own behaviours.

Topic 1 introduced the concept of effective learning environments (ELEs). These environments will minimise the chance of group work problems arising if members feel safe, supported and included. The tutor can have a major influence on these three ELE components, particularly during the first tutorial contact. Effective tutors will therefore plan two core elements of their first session with a new group of students:

- a get-to-know-you activity (also known as 'ice-breaker' activities);
- an opportunity for the group members to negotiate a set of agreed ground rules for group behaviour.

McCrorie (2006) provides the following list of rules that a small group might create:

- Turn up punctually
- Finish on time
- Don't talk over each other
- Don't interrupt
- Value each person's contribution
- Maintain confidentiality within the group
- Respect each person's viewpoint
- Turn off mobile phones
- Turn up prepared
- Join in the discussion
- Keep personal issues outside the group



With the first session behind her, Tina had a chance to plan the next small group tutorial. She was worried about the possibility of Maria, Tim and Rani not contributing to the group's discussion and felt a bit uncomfortable when they had just sat there in the first session.

What strategy could Tina use to encourage everyone in the group to contribute?

Here are some options:

Strategy A: Think, pair, share

This is a very simple but often highly effective strategy for involving students who normally might not contribute to group discussion:

Step 1 **Think** – Each student thinks about their own response to a question, case or other discussion focus;

Step 2 **Pair** – Each student then chats to a neighbouring student about their thinking;

Step 3 **Share** – One member of each pair then reports the content of their discussion to the other group members.

Strategy B: Snowballing

Being a variation of Strategy A, Snowballing commences with each group member thinking about a question or other stimulus and then moves to students sharing their thoughts in pairs. After a reasonable discussion time two pairs join together and continue the discussion. This process can continue at the tutor's discretion.

Strategy C: Cooperative learning roles

This strategy involves the tutor (or group) assigning functional roles to the group members. Not all group members need have a role in every session, but the roles need to be rotated around the group over time. Roles could include:

- Chair – convenes the group and generally keeps the group on task;
- Scribe – records the group's discussions;
- Ideas Tracker – keeps a diagrammatic record of the group's discussions;
- Researcher(s) – sources the information required by the group;
- Reporter(s) – prepare verbal and/or written reports of the group's work;
- Gofer(s) – collect resources in equipment-based activities.

Strategy D: Jigsaw strategy for larger classes

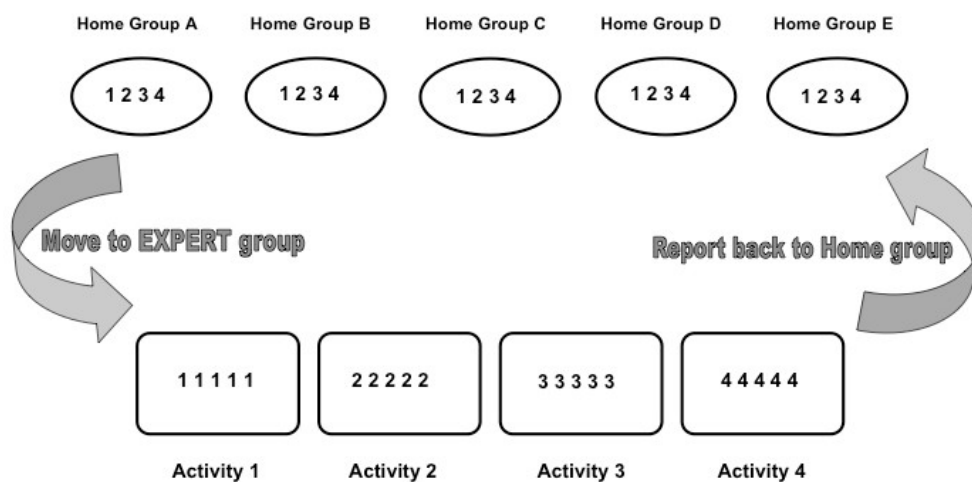
When working with classes rather than small groups, the Jigsaw strategy is very useful providing it is not over-used.

Step 1

Assuming a class size of 20, divide the class into five groups of four students. These are now the Home groups. Ask the students to number themselves off within their group and make sure they have made a mental note of who else is in their group.

Step 2

Now form four new groups, the Expert (or Working) groups, by asking all the students with the same number to meet together. This means all the students who are numbered '1' in their Home group will now meet together in the Number 1 Expert group. Repeat for the other students (see diagram below).



Step 3

Each Expert group should now be provided an activity unique to their group. This means planning four activities in advance that relate to the session's topic. For example, if the topic is asthma, Expert group 1 could investigate the pathophysiological aspects, Expert group 2 could research causes and triggers of asthmatic events, Expert group 3 could investigate clinical features and Expert group 4 could prepare a summary of treatments and management plans.

It is absolutely critical the students understand they will have to be engaged in their Expert group's activity as they will be required to provide an individual report of their Expert group's activity and its outcomes to their Home group.

Step 4

On completion of their activity each Expert group must ensure its members have a shared understanding of the group's findings/discussion/conclusions/results. The students return to their Home groups and take turns reporting back on their Expert group's outcomes to the other Home group members.

Working with difficult group members

It's halfway through the semester and Tina's group has been working reasonably well together. There have been minor challenges most weeks, mainly around group members talking over others, but Tina's encouragement of the group to manage itself has been fairly successful. But a couple of more significant problems have persisted – Voula has gained in confidence within the group and routinely dominates discussion, often using sarcasm or putdowns to silence others. There's no doubt she is very bright and really does know her content, but she's definitely a problem. Meanwhile, Tim has not contributed a single thing since the second week's jigsaw activity and Tina can't work out if it is shyness, boredom or disengagement.

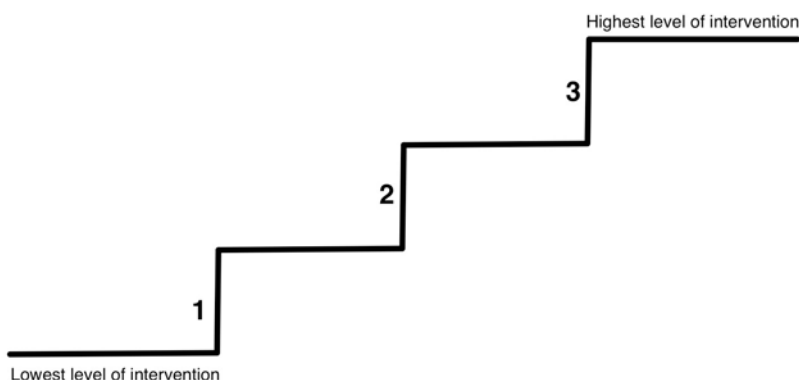


Given that the group has run through Forming, Norming and Storming and that Tina has talked with Voula and Tim outside class time, what could Tina do to address the persistent problems presented by these two group members?

Whilst it is true that every group is a unique combination of personalities and purposes, the dominant view in education and training is that the group should be primarily responsible for its own behaviours, rather than the tutor. There are times, however, when the group is unable to manage its dynamics and it is then appropriate for the tutor to become more actively involved.

One possible tutor intervention is to ask the group if it is happy with the way it is working and to invite suggestions for improvement. If this doesn't work, it's appropriate to intervene more strongly. As part of your preparation for small group tutoring we recommend you **plan** a number of responses that are sequenced by degree of intervention. This can be thought of as a series of steps, the lowest step being the gentlest or most subtle intervention moving up to what you believe would be an appropriate high level intervention. Although the specific steps will be unique to each institutional setting, the thinking required for the planning of the steps can be adapted to most contexts.

Stepped Tutor Intervention



Using the strategies outlined in the McCrorie (2006) extract (see Appendix), create three steps of progressively more interventionist responses to each of Voula and Tim. Assume they do not respond to your first and second steps.

Successful group work doesn't just happen! - the critical importance of planning

As with all teaching activities, careful planning is the critical component of a successful small group experience. Although a number of potential problems have already been identified in this Guide, here are some others identified by Killen (2007):

- students accustomed to teacher-centred instruction may need help in adapting to the small group setting;
- inequitable workload sharing within the group;
- differing learning styles and rates of progress within the group;
- highly capable group members might lose motivation when working with other members;
- highly structured activities can limit student/group autonomy;
- inadequate planning by the tutor;
- assessment – do the individual group members all receive the same grade or is it somehow individualised?

Thoughtful planning won't remove the possibility of problems arising but it **will** reduce them whilst at the same time enhancing the students' learning outcomes. So what's involved in planning? The simple answer is to use the lesson planning guidelines in Topic 1 of this Guide. By doing so, you will have covered all the core general planning elements. But in addition, small group teaching requires you to plan how you will:

- decide if any preliminary reading or research will be required of the students;
- prepare any of your students who are unfamiliar with group work – perhaps starting them working in pairs might be a good start (see Think, Pair Share, above);
- divide a class into groups – self-selected or teacher-selected?
- ensure students are all 'on the same page' concerning the session's learning objectives, the activity's timeframe, the group behaviour code and your overall expectations of the groups;
- respond to problems if they arise.

One of the more common problems (and therefore one for which you can plan) arises when the group loses the plot. Try planning some standard responses to students who are asking you to rescue them. For example: "You've told me what you can't do – how about listing what you **have** achieved?" Try using open questions such as "What would happen if ... ?" or "Well what you've said so far is all from the health professional's point of view - what would the situation look like from the patient's perspective?"

Although non-directive answers are generally preferred, it is OK to provide information if you sense that this is the **only** way to move a group out of its rut.

Helping groups reflect on their processes

Killen (2007) suggests the following response list as a means of encouraging students to reflect on their group's dynamics and to identify aspects that enhance and limit their productivity.

In the group today we:

	Yes	No	Sometimes
▪ Listened to one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▪ Did not interrupt when anyone was speaking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▪ Explored new ideas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▪ Kept focused on our goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▪ Helped one another to learn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▪ Encouraged one another	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
▪ Learned something new	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The next time we work as a group we can be more productive if we

Take home points – was the group work successful?

Tina was heading back to the staffroom for a well-earned break after the tutorial. Her 'gut feeling' was that things had gone well, but she felt something more specific than her gut would be better! How could she backup her overall feeling with some specifics? What could she have looked for as indicators of success?

Once again, Killen (2007) has something valuable to say on the critical question of determining small group success:

The basic evaluation question to ask is 'Did the students achieve the learning outcomes?' In addition to this focus on learning outcomes, it will be useful to ask the following questions that focus on the learning process:

- Did all the students participate actively in the group work? If not, why not?
- Were the groups and their activities manageable? If not, why not?
- Were the group activities sufficiently complex to challenge the students and engage them in higher order thinking?
- Was there sufficient time to for each group to finish the set activities and reach a conclusion?
- Were the students engaged in deep or surface learning?

- Was each group leader effective? If not, why not?
- Did the other group members fulfil their roles (e.g. recorder) effectively?
- Did the students co-operate with one another and involve all members of each group the discussions and decisions?
- Was the method of 'reporting back' effective?
- How could this group activity be improved for future classes?

(p. 178)

References & further reading

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Giving effective performance feedback



Topic 3

Giving effective performance feedback

This guide provides an overview of the principles and methods of providing effective verbal and written feedback to learners.

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Topic Objectives

This topic will provide you with the opportunity to:

- Reflect on past and current methods of providing feedback to learners
- Examine the purpose of giving feedback to learners
- Explore general principles of feedback
- Observe and apply the Pendleton Model of giving effective feedback

Key Definition

What is feedback?

Feedback is specific information about the comparison between a trainees observed performance and a standard, given with the intent to improve the trainees performance.

What is feedback?

The central role of feedback in student learning is well recognised. Feedback is something that is valued highly by educators and students alike. We know from our own personal experiences and that which is reported in learning evaluations that students 'desire' and even 'demand' feedback. We also know that provision of effective feedback improves learning outcomes. Yet despite the frequency in which feedback is used in health professional education it still remains a poorly defined and utilised concept. In a meta-analysis of the literature, Van der Ridder et al (2008) devised the following definition.

Feedback is:

"Specific information about the comparison between a trainees observed performance and a standard, given with the intent to improve the trainees performance".

From this definition it can be seen that:

Feedback is the provision of **specific** information

There is an assumption that the performance of the learning is 'benchmarked' against a known **standard**

Feedback is designed to **improve performance**

Feedback can therefore be seen as quite a complex intervention that is used to change behaviour. Clearly effective feedback involves engagement and skill on the part of the person giving the feedback, and responsiveness on the part of the receiver of the feedback.

This guide is designed to provide you with some useful and easy to implement strategies to develop your skills in giving feedback to those you teach.

Reflective activity



Think of an example from your own experiences when feedback worked well? This might be when you were a student or as a teacher.

What happened?

What were the factors that contributed to the success of the feedback?

Now, think about an example of when feedback did not work well.

If you were the recipient of this feedback:

What was said?

How did it make you feel?

Undoubtedly, there is significant responsibility in giving feedback to your learners. Aspects such as setting the right environment for feedback, the style or manner in which feedback is given and the content of what is said all need to be carefully considered before entering a feedback situation.

In the provision of feedback, there are two extremes that need to be avoided:

The **'damaging'** feedback

This is feedback that is highly judgemental, negative, malicious and harmful. Ill-considered feedback can be damaging to the recipient with no advantage gained as **nothing is learnt**.

The **'vanishing'** feedback (Ende, 1984)

This is when the tough or difficult feedback is avoided. Rather than confronting the issues, the clinical teacher 'skirts' around the edges and fails to deliver the message that needs to be heard. This is vanishing feedback that again serves no purpose as the **message is lost**.

Who should give feedback?

According to Ende (1983), feedback should be given by anyone who is in a position to make a valid observation of a learner's performance. Ideally, the feedback should be given by someone with the clinical expertise to know the expected performance standards required and the educational understanding of the feedback process.

The best person to provide feedback is usually the clinical teacher, or someone who has worked regularly with the learner, has observed the learner's conduct and performance in the clinical context and who is able to accurately and fairly provide information to the learner on their progress.

In most circumstances, the person giving feedback has a clinical teaching or a supervisory role with the student and has some idea of the curriculum requirements of the course/educational program that the learner is associated with.

"... feedback is formative, not evaluative – it presents information, not judgement ..."

(Ende, 1983)

The EIGHT PRINCIPLES of conducting effective feedback

There are eight guiding principles that need to be considered for any feedback related activity. These principles apply to both verbal and written feedback and should underpin the organisation, approach and execution of any feedback encounter.

ONE: Feedback should be PLANNED

Effective feedback is best when it has been planned. Planning involves setting the appropriate place, timing and environment for the feedback session.

Place: The venue is an important consideration. Feedback conducted away from patients, peers and the 'hustle and bustle' of the clinical environment is preferable to avoid any distractions and keep the time focused on the learning outcomes.

Timing: Feedback is more beneficial to the learner if it is immediate. If feedback is delayed, there is potential for errors of observation and unreliable recollections of the clinical situation. A learner is also more likely to respond positively and act upon the information given, if it is recent and fresh in their mind. In the clinical environment, this may not always be possible however; clinical teachers should always strive to provide feedback that is accurate and timely.

Provision of an appropriate time frame to allow discussion of the performance issues is likewise necessary. This can range from 5-10 minutes for simple feedback situations to up to 30 minutes, or more, for more complex issues.

Feedback must also be followed-up by the clinical teacher. It is vital that there is time allocated for a review of the recommendations for improvement that have been made based on previous feedback. As a general rule a 2 week review, following the feedback, is useful however this will vary greatly depending on the length of time the learner is with you and the amount of time and opportunity you have with your learner.

Environment: Setting the right tone and mood for the feedback encounter can engender an atmosphere of trust and respect. One useful strategy is to establish a culture of 'giving feedback', which can be done at the commencement of any clinical attachment, rotation or placement. Make it clear to your learner(s) at the very beginning of their time with you that you will be providing frequent opportunities for feedback under your supervision. That way they will come to expect feedback, that it won't just be about the negative aspects, and they will know that you will be taking an interest in their performance development and professional growth. There will then be no surprises...

Feedback must be conducted in a safe and supportive environment. There are aspects to feedback that have consequences for the learner, particularly if there is a need for corrective actions. The effect on the learner's motivation and self-esteem can be significantly affected by the manner in which feedback is conducted. It is therefore important to recognise the learners' readiness for, and receptiveness to, the feedback that is given. Does the learner know this is feedback? Have you set up a safe and supportive environment for the feedback encounter? Was the clinical situation stressful? Do they need time to recover / reflect? Have you allowed for response and interaction on the part of the learner? Other important considerations include being aware of any verbal and non-verbal responses to the feedback you have given. Have they got a closed physical stance? Are they engaged with the process? Are they responding defensively?

The following strategies are a helpful guide when planning your feedback sessions:

Example:

- Tell your learner that you would like to give them feedback;
- Find a suitable room or area away from patients and staff;
- Allow your learner about 10 minutes to go away and think about how things went; (This will also give you time to 'jot' down a few notes)
- Regroup with the student (preferably away from the patient) and provide your specific feedback.

Also:

- Never correct a learner in front of a patient;
- Don't just focus on the negative. There is ALWAYS something that is done well! Feedback needs to be balanced in that it needs to reflect what worked well and what didn't work so well in a way that supports and maximises learning;
- Choose polite, professional and appropriate language.

Reflective activity



Think of your current teaching context. What steps could you implement now to PLAN more effectively for giving feedback?

Who are your learners?

When and how will you introduce the notion of a "culture of feedback"?

Where will you give feedback?

When and how often will you give feedback?

How will create a safe and supportive feedback environment?

TWO: Feedback should be EXPLICIT

A frequent criticism from students about their clinical teachers is the lack of information they receive about their performance. Conversely, clinical teachers often believe they are always giving feedback! This contradiction might exist because students are not always aware they are being given feedback when it happens because it has not been made explicit to them. So, one of the simplest, yet most powerful strategies that can be used to overcome this problem is simply telling the learner that you are about to give them feedback prior to each feedback situation. Let them know that **"This is Feedback!"** By making it explicit there is no room for misunderstanding on the part of learner and teacher. This strategy is called *'signposting'*.



THREE: Feedback should be DESCRIPTIVE RATHER THAN EVALUATIVE

Accurate descriptions on performance achievements and areas requiring improvement is the most effective way of giving information to a learner. Evaluative feedback is too general and has the potential to be vague and judgemental. Descriptive feedback uses statements that describe actual performance. It is usually non-judgemental as the clinical teacher merely describes exactly what has happened. This is a skill to develop on your part but it will ensure that your learners do not become defensive about your appraisal of them as they cannot dispute the facts that occurred.

Example:

Rather than saying *“The beginning was awful, you just seemed to ignore the patient”* a better way of describing this might be – *“At the start, you were looking at your notes which prevented eye contact with the patient”....*

FOUR: Feedback should FOCUS ON BEHAVIOUR RATHER THAN PERSONALITY

Feedback that is directed at personality traits or attributes of the learner are open to misinterpretation and can impact the learners self-esteem. Feedback should also centre on behaviours that are remediable. Focusing on the actual behaviour of the learner minimises a defensive response and allows opportunity to change behaviour if necessary.

Example:

Rather than saying *“You didn’t really seem interested in getting information from that patient. You didn’t seem to care”*, it would be better to say – *“roughly how many open-ended questions did you think you asked that patient”....*

FIVE: Feedback should be SPECIFIC RATHER THAN GENERAL

As with principle THREE, it is very difficult for learners to make changes to their practice if feedback is too general. Feedback requires specific information about what happened or what the learner actually did. Tangible, clearly defined information about the actions that have been **observed** or behaviours that have been noted is the best approach and is more likely to result in improved outcomes. In this way, feedback is best when it is based on first-hand data.

Example:

Rather than saying *“You better improve your clinical skills”*, it would be better to say – *“you picked up really well on the patient’s back pain but you seem unsure about how to explore the problem”.*

SIX: Feedback should BE CONCISE RATHER THAN INFORMATION OVERLOAD

Feedback that is laden with information, advice and recommendations for improvement will overburden the learner. It is important to limit the information to a few key messages. This will ensure that the learner has a clear understanding of what they did well and what areas require improvement. As a general rule, just give 2 - 3 areas that the learner needs to focus on following the feedback.

Example:

Rather than saying "I would you like to go away and revise all the drugs you should know about when treating a patient following a heart attack", it would be better to say – "Following this feedback, make sure you can prioritise the first line of treatment for a patient following a heart attack".

SEVEN: Feedback should BE VERIFIED BY THE RECIPIENT

It is vitally important that the learner is given an opportunity to self assess and reflect on their performance. The learner needs to confirm with you that they either agree or disagree with the information you have given. This serves a number of purposes, firstly it encourages personal reflection, secondly it encourages teacher and student dialogue where both are working as allies with common goals and, thirdly, it enables you to check that the learner has insight into their performance.

Example:

Rather than saying "You were terrific!" It would be better to say – "How did you feel that situation went."

EIGHT: Feedback should be HONEST

Finally, all feedback you provide to your learners needs to be relevant, meaningful and honest. Don't say "that was OK" when it was not but don't be brutal.

Adapted from Moorhead et al (2004), Ende (1984) & Nicol, Macfarlane-Dick (2006)

The 'Pendleton Model' of Giving Feedback

The Pendleton model of giving feedback uses a simple set of steps that can be highly effective and easy to implement. The model is useful for formal and informal feedback situations. It can be used for feedback on communication skills, assessment skills, consultations, case presentations, practical skills and observed professional behaviour.

The model is a step-by-step process in which each step is important, and should be conducted in the order described below:

1. The learner performs a clinical activity
2. The clinical teacher asks the learner how they felt (limit this to an overall impression of their own performance – intervene if the learner starts to talk about negative aspects)
3. The clinical teacher asks the learner what they thought was done well and why (make sure the learner maintains focus on the positive!)
4. The clinical teacher then gives feedback on what was done well and why
5. The clinical teacher asks the learner what could be done better and how
6. The clinical teacher then gives feedback on what could be done better and how, in a supportive manner
7. The clinical teacher summarises strengths and up to 3 things for the learner to focus on (No more than 3!)

	LEARNER	OBSERVER
Positive aspects	1	2
Areas for improvement	3	4

Pendleton's Recommended Order of Feedback

"If feedback is to be effective it needs to be frequent, constructive and instructive".
(Dinham, 2008)

Activity



This is your opportunity to view the Pendleton Model of Giving Feedback. Using the DVD attached at the back of this booklet, view Video Clip No. 1: *The Interview*.

Think of what the student did well in this interview and why

Write down 1 or 2 aspects to this clinical encounter that you thought could be improved upon.

View Video Clip No. 2: *Giving effective performance feedback*

Identify how the model was implemented in this feedback session.

Would you do anything differently?

Application

For feedback to be effective, it really needs to be practised. Sometimes using a model can feel artificial and stilted until you develop a natural process and use of language and phrases that are meaningful and helpful to the learner. Most people who use the Pendleton Model find it easy to apply and once mastered, the steps are a comfortable and natural process of providing information to learners. So, now you can make a start to implement the Pendleton model as you work with your learners. We are confident that the process will be enjoyable for you in your teaching role as well as valuable for your learners.

THE BASIS OF STRONG FEEDBACK

Well observable tasks and competencies
Expert observer and feedback provider
Highly specific information
Explicit standard
First hand observation
Explicit aim of performance improvement
Plan to re-observe

From van de Ridder et. Al. (2008)

Summary points

- Learners need feedback to modify and improve performance
 - Feedback needs to be effective and objective
 - Clinical teachers should encourage a culture of giving feedback with all learners and conduct feedback in a safe and supportive manner
 - Feedback should be:
 - Planned
 - Explicit
 - Descriptive
 - Behaviour centred
 - Specific
 - Concise
 - Verified by the recipient
 - Honest
 - Using a model of feedback can enhance the learning process and ensure more effective achievement of learning outcomes
-

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Assessment in the clinical setting



Topic 4

Assessment in the clinical setting

This topic introduces the activity of assessment as part of the whole learning experience of your health professional student. This interactive topic will assist you to enhance your understanding and skills about the principles, practices and outcomes of assessment as they relate to a student's progression through their mandated clinical learning experiences, and their successful journey through their academic program. Cases representing challenges in clinical assessment are considered to assist you in your assessment practice.

Robyn Hill, Gippsland Medical School
Jill French, School of Nursing & Midwifery

What is assessment about?

Topic Objectives

This topic will provide you with the opportunity to:

- Reflect on your experiences with student assessment in the clinical setting;
- Recognise the range of assessment activities commonly used in clinical settings;
- Apply two key assessment principles (validity and reliability) to specific situations in your clinical teaching practice;
- Recognise some of the challenges involved in the assessment process.

When we assess a student, we gauge the extent of their learning and make a judgement about their performance. We do this by describing, recording, scoring, and interpreting information about a student's knowledge, skills and attitudes against specific criteria. Such criteria are designed to reflect safe and competent standards of clinical practice.

In the clinical setting, these criteria might exist in a number of forms. They might be the knowledge-based objectives of a clinical teaching session, the sequential steps of a procedural skill, or description of required level of interaction between the student and a patient or team member.

If you are involved with students in the clinical setting, you will undoubtedly be required to participate in their assessment, as it is an integral part of the teaching process. This is sometimes referred to as 'in training' assessment. Remember that you are providing a valuable contribution to the student's overall assessment; however no single assessment activity can provide all the information we need to determine that student's ability to provide safe and competent care to patients.

In the Topic in this series that deals with *Planning Teaching Sessions*, you will note (page 3) that objectives are a valuable way for students and educators to know what is expected of students on completion of the learning event. These objectives also provide a clear indication of what should be expected of the student at the time of assessment.

Key Definitions

Assessment

Assessment is the process of making a judgement about a student's performance against established criteria such as learning objectives or competency statements.

Reflective Activity

Think about a recent situation where you were required to assess a student in your clinical site.

- What was the focus of the assessment activity?
- Were you required to use a specific 'instrument' or rating scale to record your judgement?
- Did you have clear guidelines about the process under which the assessment was to take place?
- To whom did you have to forward the results of the assessment?
- Did you feel prepared and supported to undertake the assessment?
- How did you manage the period immediately after the assessment activity with the student?

Purposes of Assessment

Tina is a clinical educator in a large regional hospital. She has been working with the local university teaching small groups of undergraduate nurses. Recently she has also taken on the supervision of medical students while they are on early clinical placements in the hospital.

Tina supervises the medical students as they practise their patient interviewing, history taking and basic procedural skills. The students keep a Clinical Learning Record, which guides their activities, and this must be completed by each student and Tina on a regular basis.

Tina uses her time teaching and supervising each student as effectively as she can. She knows that it is important to assess the students continuously to ensure that they develop competence and confidence. She also realises that each student learns and develops their skills differently, and may respond differently to various forms of feedback.



Do you undertake a role similar to that described above? What has been your experience of supervising students with the requirement for continuous assessment?

Formative Assessment

Assessment which takes place during the learning activity or clinical placement, for the purpose of gathering information about a student's progress, is termed **formative assessment**.

Formative assessment is not used for attributing a final mark or grade; rather it is a facilitative process with the primary purpose of assisting the student reveal their strengths and build up their weaker areas of practice.

In order to make a judgement about a student's achievement of their learning objectives, the clinical educator needs to gather information.

Formative assessment creates an opportunity for the clinical educator and the student to review progress in a non-threatening way and, as such, it becomes a valuable learning opportunity for the student.

Students always appreciate the opportunity to obtain feedback on their knowledge or performance; it provides them with a clear picture of how they are progressing and what more they need to do to achieve the required objectives.

What does formative assessment look like?

Formative assessment in the University might take the form of on-line quizzes, short written reflective assignments or paper based tests. It may also include observation of the student as they work with their peers in group learning activities, as they practise clinical skills in the skills laboratory, or present a short talk to the rest of the student body and teachers.

In the clinical environment many of these activities can also be used as a basis for formative assessment. Problem-based learning groups provide an excellent way of monitoring a student's communication, as does observation of a clinical encounter with a patient.

Skills practice in a simulated environment, followed by real patient interaction provides a valuable opportunity to observe the student as they transfer their learning from a highly structured, controlled and predictable situation to a real time, patient-focussed event.

Tina observes Max, an older medical student, as he performs an intramuscular injection on a part-task trainer in the hospital skills laboratory. Max gathers the required equipment and commences to draw up the injections. Tina reminds Max to wash his hands first.

Max completes the skill but removes the needle from the syringe to dispose of it in the sharps bin. Tina reminds Max that this is not consistent with safe sharps disposal practice. Tina and Max discuss the procedure, and Tina asks Max to perform the skill again. He manages the skills well, remembering to wash his hands prior to the 'procedure' and dispose of the sharps according to hospital policy.

The next day Tina observes Max giving an intramuscular injection to a patient. Max complies with all the requirements of the procedure, demonstrating to Tina that he has incorporated her feedback into his practice. Tina congratulates Max on his improved performance, and they record the event in Max's Clinical Learning Record.

From the above scenario, you can see that feedback from the clinical educator is crucial during formative assessment.

This can take the form of re-explaining the steps of a skills, arranging further practice under supervision to correct any misunderstanding or inaccurate practice, or identifying further reading or practice prior to the next assessment event.

Feedback should always be couched in terms of the performance, not the person. Aligning feedback with the objectives of the activity will help you to ensure that an objective, performance-based discussion takes place as soon after the event as possible.

Tina is approached by the university to see if she would like to participate in the end of year practical (OSCE)¹ exams for the first year medical students.

She realises that this is likely to be different from what she has been doing with the students while they are on clinical placement, and is not sure of what will be expected of her.

Will she be able to test each student fairly, and will she assess the students to the same level as the other assessors in this OSCE?

For further assistance with providing Feedback, refer to Topic 3 – Giving Effective Performance Feedback.

Summative assessment

Assessment which takes place at the end of a period of learning or clinical placement, for the purpose of recording a student mark or grade, is termed **summative assessment**.

Summative Assessment is also about making a judgement regarding a student's achievement of certain learning objectives. However summative assessment focuses on the 'whole' and is used to provide information about how the student has learned and to what extent the learning objectives have been met for an overall specific area of study.

Summative assessment provides information that enables curriculum staff to decide whether the student has met course objectives sufficiently to progress to the next phase of their learning.

The results of your assessment(s) of the student in a particular activity will then be passed back to the School for collation into a final result.

What does summative assessment look like?

Summative assessment in the University might take the form of written exams, assignments, clinical skills examinations (OSCEs), observed patient encounters (history taking and examination), case presentations, and may also include group activity.

In the clinical environment the most common activities that would contribute to summative assessment would be clinical skills examinations (OSCEs) with part-task trainers, simulated or real patients, observed real-patient encounters (history taking and examination), or case presentations.

¹ OSCE – Objective Structured Clinical Examination

It is important to note that summative assessment situations should be safe for the student and the patient, and be constructed to avoid unpredictable occurrences.

Tina decides to talk with a medical colleague at the hospital.

She knows that Patrick has been working with registered nurses, nursing and medical students and medical graduates for years, teaching and assessing them as part of his honorary appointment to the University Faculty of Health Sciences.

She discovers that assessment is quite a scientific process, and there are a number of principles that guide its successful implementation.



From your experience, what principles do you think underpin assessment? Do you think people need training in how to assess students?

Principles of assessment

Assessment is focussed on the activity of the individual student. This is true for formative and summative assessment. As such, the performance of the student is measured against criteria such as learning objectives, not what other students can do.

We term this '**critterion-referenced**' assessment.

Most summative assessments are constructed by the University, communicated to the students as part of their introduction to the Unit, and printed in their Unit Guides or course documentation.

Assessment activities for the students will have been 'mapped' against the objectives of the Unit or Course, and will generally require a judgement about the student in terms of core or essential knowledge, skills and attitudes.

It is this alignment with the objectives of the course that makes assessment **valid**.

Validity therefore means that the assessment is measuring what it is supposed to be measuring; the learning objectives and not what the assessor thinks ought to be measured.

It is also important that you, as an assessor, ensure that each student you assess is measured against the learning objectives or criteria in the same way, i.e. in a **reliable** way.

Reliability reflects the degree to which the assessor consistently uses the same criteria, at the same level for each student undertaking a particular assessment.

Tina is supervising four second-year nursing students. The students are ready for assessment of the skill – ‘performing an intramuscular injection’ - on a patient.

The university has supplied the assessment instrument which includes the steps of the procedure, and the criteria against which the students will be judged. Tina realises that this instrument will ensure the validity of the assessment process.

As part of this procedure, Tina is expected to gauge each student’s underpinning knowledge relating to the procedure. The University has not indicated the particular questions that she should use to assess this knowledge.

Tina wants to ensure that her assessment approach to each student demonstrates reliability. She therefore constructs a set of questions that she will ask each student during the assessment activity. These questions relate to selection and assessment of the site, anatomy of the skin and underlying structures and policy regulations pertaining to administration of medications in hospitals.

Tina forwards these questions to the academic contact in the University to check that she is on the right track. She is relieved when she gets a positive response, and feels that she is really coming to understand what she once thought was an obscure process!



Identify an instance when you were required to assess one or more students undertaking a skill. How did you ensure that the assessment was valid? What steps did you take to ensure that the assessment of each student was reliable?

Challenges in clinical assessment

The clinical experience, and the assessment activities that are part of that experience, can make up a major part of a health science student's program.

During a student's time in a particular clinical placement there are additional challenges that might have little (on the face of it) to do with the academic purpose of the placement.

In reality, these challenges may impinge on the student's management of their time, their learning capacity and readiness for assessment.

Feedback from students and clinical educators indicates some of the challenges facing students include:

- financial problems
- work commitments
- vehicle breakdowns
- being away from home
- fear of the placement
- perceived knowledge deficits
- potential harm to a patient as a result of their actions
- the prospect that they might administer incorrect treatment, including medications, and
- the ability to effectively communicate with patients and other health professionals.

Clinical educators also identify concerns that they feel may pose a challenge to their ability to make a fair, honest and impartial judgement about a student's abilities to meet the required learning objectives or clinical competencies.

Some of these challenges can impact on the clinical educator's confidence in undertaking the assessment. These include questions such as:

- Can I be fair and objective?
- How do I deal with the student not meeting objectives?
- How do I manage a difficult student?
- How do I identify a struggling student?
- What do I do when staff are not willing to assist students?
- When can I get assessments completed?
- How do I complete the required documentation for the university?

The following cases describe several challenges for the clinical educator and offer potential solutions for each case.

Case 1

The 'struggling' student

Rana is supervising a group of nursing students on a two week practicum in a surgical ward.

By the middle of week one she is concerned about Jo as she is not keeping up with the workload, is disorganised, only willing to offer answers if directly questioned and is "hiding" away from any engagement with Rana and other staff.

Rana gets feedback from staff working with Jo and they reinforce Rana's concerns.

Rana keeps a daily written account of Jo's performance and other feedback provided by staff on the ward.

Before looking at the Solutions below, put down you thoughts about what you might do in Rana's place:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Solutions

- Have a private meeting with the student to discuss the issues of her performance.
- If there are external problems identify appropriate resources for assistance (counselling services).
- Find out how Jo feels about her performance.
- Identify daily goals that are realistic and achievable for Jo to work towards.
- Discuss the issues with the university and keep them informed of Jo's progress.
- Re-evaluate Jo's performance and achievement of goals on a daily basis.
- Give feedback on her performance.

Case 2

The student not meeting practicum objectives (the 'failing' student)

Julie is supervising a group of physiotherapy students in an acute health care facility.

Adam is not performing at a level that is to be expected from these students.

He appears disinterested and needs prompting to undertake any patient interactions.

When questioned he says that this is not really the course he wanted to do but his marks in VCE were not good enough for medicine (the course he really wanted) and so he is doing this under duress.

Julie has many discussions with Adam and tries to engage him in patient related activities that are fun and challenging for him.

He remains disinterested and is reluctant to undertake his assessments.

Julie reviews the placement objectives and realises that Adam is not meeting any of them.

Julie needs to initiate a meeting with Adam as soon as possible.

Before looking at the Solutions below, put down your thoughts about what you might do in Julie's place:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Solutions

- Contact the university and inform them of the problem.
- Have a private meeting with Adam and discuss the issues with him.
- If there are external problems identify appropriate resources for assistance (counselling services or referral back to the unit leader).
- Inform Adam that he is not meeting the placement objectives and risks a fail being recorded.
- Review the objectives with him.
- Some departments have a clinical review process that can be implemented (this is where the student is given a series of challenges that are based on knowledge, skills and attitudes related to the placement objectives).
- Ask the unit leader to come to the venue to assist you with the process.
- Ensure that all communication is documented.
- Keep notes on Adam's performance that will form the basis by which your assessment of him is validated.

Case 3

The student with English as a second language

Jack is a clinical educator in a large inner city hospital.

He is based on a ward where medical and nursing students are placed as part of their respiratory medicine rotation.

Fatima, an international medical student is based on the ward for the next 3 months and as part of Jack's role as ward educator he orientates her to the ward.

During the orientation Jack notices that Fatima appears to have difficulty in expressing herself in English and is reluctant to ask questions.

Two weeks into Fatima's rotation Jack is called by the unit manager who has received complaints from staff and patients that Fatima is not able to follow instructions, has a poor grasp of spoken English and is not able to make herself understood by the patients.

Jack meets with Fatima to discuss the issues.

Before looking at the Solutions below, put down your thoughts about what you might do in Jack's place:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Solutions

- Privately discuss your concerns with Fatima.
- Enquire as to how she feels the rotation is progressing and if she is aware of any problems that have arisen.
- Contact the university and alert them to the problems that have been identified.

Summary points

- Assessment of students in the clinical environment is a complex process.
- Any assessment should be focussed on the activity of the individual student.
- Assessment is the outcome of a judgement about a student's performance against established criteria.
- Assessment should be both valid and reliable.
- Assessment may be used for formative or summative purposes.
- Formative assessment assists the student reveal their strengths and build up their weaker areas of practice.
- Formative assessment includes observation of group work, clinical skills practise or structured presentations.
- Feedback is crucial during formative assessment.
- Summative Assessment is about making a judgement regarding a student's achievement of certain learning objectives.
- Summative assessment activities include clinical skills examinations (OSCEs) with part-task trainers, simulated or real patients, observed real-patient encounters (history taking and examination), or case presentations.
- Summative assessment situations must be safe for the student and the patient.
- The clinical educator should ensure that the student is ready for the assessment process. Be alert to situations that might create challenge or difficulty for the student when assessment is to be conducted.

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