How am I going there?

The second question, 'How am I going there?', highlights the notions of progress feedback, or feedback relative to the starting or finishing point, and is often expressed in relation to some expected standard, to prior performance, or to success or failure on a specific part of the task. This is where it is most valuable to provide rapid formative feedback – particularly relative to the criteria of success rather than comparative to where other students are. Wiliam and colleagues (Wiliam & Thompson, 2008; Wiliam, Lee, Harrison, & Black, 2004; Black, Lee, Marshall, & Wiliam, 2003) argued that there are five broad strategies that teachers can use in this phase to make learning more efficient and effective relative to 'How am I going there?': clarifying and sharing learning intentions and criteria for success; engineering effective classroom discussions, questions, and learning tasks; providing feedback that moves learners forward; encouraging students to see themselves as the owners of their own learning; and activating students as instructional resources for one another.

Where to next?

E of

The third question is more consequential: 'Where to next?' Such feedback can assist in choosing the next most appropriate challenges, and can lead to developing more self-regulation over the learning process, and greater fluency and automaticity, to learning different strategies and processes to work on the tasks, to deeper understanding, and to more information about what is and what is not understood. This is the question of most interest to students and the aim is to not only provide them with the answer to 'Where to next?', but also to teach them to have their own answers to this question.

The four feedback levels

VISIBLE LEARNING - CHECKLIST FOR DURING THE LESSON: FEEDBACK

34. Teachers are aware of, and aim to provide feedback relative to, the three important levels of feedback: task; process; and self-regulation.

The three feedback questions work at four levels of feedback – and the four levels correspond to phases of learning: from novice, through proficient, to competent.

1. Task and product level

Feedback at the task and product level is powerful if it is more information-focused (for example, correct or incorrect), leads to acquiring more or different information, and builds more surface knowledge. This type of feedback is most common in classrooms and most students see feedback in these terms. It is often termed 'corrective feedback', or 'knowledge of results', and is commonly given in classrooms through teacher questions (most of which are at this information level); it is most provided in comments on assignments; it is often

specific and not generalizable; it is more often the nature of feedback given to a whole class; and it can be powerful particularly when the learner is a novice (Heubusch & Lloyd, 1998). Examples include indicating correct or incorrect responses, needing more or different responses, providing more or different information relevant to the task, and building more task knowledge. Such task feedback is critical and serves as a pedestal on which processing (level 2) and self-regulation (level 3) can be effectively built.

An example of such feedback might be as follows.

. . . Your learning goal was to structure your account in such a way that the first thing that you wrote was the first thing that you did. Then, you were to write about the other things that you did in the same order that they happened.

You've written the first thing first, but after that it becomes muddled. You need to go through what you've written, number the order in which things happened, and rewrite them in that order.

2. Process level

The second level is feedback aimed at the processes used to create the product or to complete the task. Such feedback can lead to providing alternative processing, reducing cognitive load, helping to develop learning strategies and error detection, cueing to seek a more effective information search, recognizing relationships between ideas, and employing task strategies. Examples include helping to provide connections between ideas, providing strategies for identifying errors, learning how to explicitly learn from mistakes, and providing cues about different strategies or errors. Feedback at this process level appears to be more effective for enhancing deeper learning than it is at the task level, and there can be a powerful interactive effect between feedback aimed at improving the strategies and processes, and feedback aimed at the more surface task information. The latter can assist in improving task confidence and self-efficacy, which in turn provides resources for more effective and innovative information and strategy searching. Chan (2006) induced a failure situation and then found that feedback was more likely to enhance self-efficacy when it was formative rather than summative, and self-referenced rather than comparative to other peers' feedback.

Examples of feedback at this level might be as follows.

- \dots You're stuck on this word and you've looked at me instead of tried to work it out. Can you work out why you might have got it wrong and can you then try a different strategy?
- \dots You're asked to compare these ideas. For example, you could try to see how they are similar, how they are different \dots How do they relate together?

3. Self-regulation or conditional level

The third level is more focused at the self-regulation level, or on the student's monitoring of their own learning processes. Feedback at this level can enhance students' skills in self-evaluation, provide greater confidence to engage further with the task, assist in the student seeking and accepting feedback, and enhance the willingness to invest effort into seeking and dealing with feedback information. Examples include helping students to identify feedback themselves and how to self-evaluate, providing opportunities and awareness of the importance of deliberate practice and effort, and developing confidence to pursue the learning. When students can monitor and self-regulate their learning, they can use feedback more effectively to reduce discrepancies between where they are in their learning and the desired outcomes or successes of their learning. Such feedback — usually in the form of reflective or probing questions — can guide the learner on 'when', 'where', and 'why' in selecting or employing task and process-level knowledge and strategies.

Examples of such feedback might be as follows.

...I'm impressed by how you went back to the beginning of the sentence when you became stuck on this word – but, in this case, it didn't help. What else could you do? When you decide on what it means, I want you to tell me how confident you are and why.

... You checked your answer with the resource book [Self-help] and found that you'd got it wrong. Have you got any idea(s) why you got it wrong? [Error detection] What strategy did you use? Can you think of another strategy to try and how else might you work out if you're right?

4. Self level

E

VISIBLE LEARNING - CHECKLIST FOR DURING THE LESSON: FEEDBACK

35. Teachers are aware of the importance of praise, but do not mix praise with feedback information.

The fourth level is feedback directed to the 'self' (for example, 'You're a great student', or 'Well done') and is commonly subsumed under the notion of 'praise'. Praise is often used to comfort and support, is ever-present in many classrooms, and is welcomed and expected by students – but it so often directs attention away from the task, processes, or self-regulation. The major message is to provide praise, but not to give it in such a way that it dilutes the power of feedback: keep *praise* and *feedback* about the learning separate.

Praise usually contains little task-related information and is rarely converted into more engagement, commitment to the learning goals, enhanced self-efficacy, or understanding about the task. By incorporating praise with other forms of feedback, the learning

information is diluted; praise includes little information about performance on the task and praise provides little help in answering the three feedback questions. Wilkinson (1980) found a low effect size for praise (d = 0.12), as did Kluger and deNisi (1996; 0.09), and providing feedback with no praise compared to feedback with praise has a greater effect on achievement (0.34).

There is now increasing evidence for this dilution effect of praise on learning. Kessels, Warner, Holle, & Hannover (2008) provided students with feedback with and without praise; praise led to lower engagement and effort. Kamins and Dweck (1999) compared the effects of praising a person as a whole (for example, 'You're a clever girl') with the effect of praising a person's efforts ('You're excellent in putting in the effort'). Both led to zero or negative effects on achievement. The effects of praise are particularly negative not when students succeed, but when they begin to fail or not to understand the lesson. Hyland and Hyland (2006) noted that almost half of teachers' feedback was praise, and that premature and gratuitous praise confused students and discouraged revisions. Most often, teachers used praise to mitigate critical comments, which indeed diluted the positive effect of such comments (Hyland & Hyland, 2001). Perhaps the most deleterious effect of praise is that it supports learned helplessness: students come to depend on the presence of praise to be involved in their schoolwork. At best, praising effort has a neutral or no effect when students are successful, but is likely to be negative when students are not successful, because this leads to a more 'helpless or hopeless' reaction (Skipper & Douglas, 2011).

This lack of support for praise does not mean that we should be horrible to the students; this is one of the clearest negative influences. Students need to feel that they 'belong' in learning, that there is a high level of trust both between teacher and student and with their peers, and feel that their work is appropriately esteemed (when earned). Indeed, students see praise as important for their success in school and the presence of praise is related to learning outcomes. The message is that for *feedback* to be effective in the act of learning, praise dissipates the message. Praise the students and make them feel welcomed to your class and worthwhile as learners, but if you wish to make a major difference to learning, leave praise out of feedback about learning.

Overall comment on the four levels

The art of effective teaching is to provide the right form of feedback at, or just above, the level at which the student is working – with one exception: do not mix praise into the feedback prompt, because this dilutes the effect! When feedback draws attention to the self, students try to avoid the risks involved in tackling a challenging assignment – particularly if they have a high fear of failure (and thus aim to minimize the risk to the self). Thus, ideally, teaching and learning need to move from the task towards the processes or understandings necessary to learn the task, and then to regulation about continuing beyond the task to more challenging tasks and goals – that is: from 'What do I know and what can I do?', to 'What do I not know and what can I not do?', to 'What can I teach others (and myself) about what I know and can do?' This process results in higher confidence and greater investment of effort, and the aim of providing feedback is to assist students through this process. This flow typically occurs as the student gains greater fluency, efficiency, and mastery. The first three feedback levels form a progression; the hypothesis is that it is optimal to provide appropriate feedback at or one level above that at which

the student is currently functioning, and to clearly distinguish between feedback at the first three and the fourth (self) levels.

Frequency of feedback

VISIBLE LEARNING - CHECKLIST FOR DURING THE LESSON: FEEDBACK

36. Teachers provide feedback appropriate to the point at which students are in their learning, and seek evidence that this feedback is appropriately received.

The aim is to provide feedback that is 'just in time', 'just for me', 'just for where I am in my learning process', and 'just what I need to help me move forward'. There is a need to be aware that such feedback can come from many sources (and that such feedback can be wrong!). It may be misleading merely to increase the amount of feedback, or to concentrate on the giving as opposed to the receiving of feedback.

There has been much evidence about the frequency of feedback and most of it is not that informative – because there are more important factors than merely increasing the amount of feedback, or whether it is immediate or delayed. For example, Carless (2006) has shown that most feedback given by teachers is to the whole class and most of this is not received by any student – because no single student believes that it pertains to him or her! Further, feedback can come from many sources: as will be shown below, most feedback comes from peers, and sometimes this exceeds the amount of feedback received from teachers and other sources (such as books or the Internet). Most critically, wherever the feedback comes from, it is often poorly received and hardly used in revision of work.

Teachers consider their feedback to be far more valuable than do the students, because so often the latter find the former's feedback confusing, non-reasoned, and not understandable. Worse, students often think that they have understood the teacher's feedback when they have not, and even when they do understand, claim to have difficulties in applying it to their learning (Goldstein, 2006; Nuthall, 2007). Higgins, Hartley, and Skelton (2001: 270) argued that 'many students are simply unable to understand feedback comments and interpret them correctly'. Much depends on their understanding of the feedback discourse, on whether the provider is perceived as powerful, fair, and trustworthy, and on the emotions (rejection, acceptance) associated with the context and level of investment.

There have been surprisingly few studies that have investigated the actual amount and nature of feedback given and received in classrooms. Teachers see feedback more in terms of how much they give than the more important consideration of how much feedback is received by students. Carless (2006) found that 70 per cent of teachers claimed that they provided detailed feedback that helped students to improve their next assignments – but only 45 per cent of students agreed with their teachers' claims. Further, Nuthall (2005) found that most feedback that students obtained in any day in classrooms was from other students – and that most of this feedback was incorrect.

In our work, I ask a neutral person to sit at the back of classrooms and type a transcript of everything that is said and done in a 40–60 minute lesson. This person also chooses

the so highl and a Tl instar or ch tions stude that r these how

two s

that to co appro When this win pro

of ho

In

ment

minu can t

Types o

Disconfi

Confi

TABI studi

Discor

Level

Task Proc∈ Regui