Teachers talking to each other about teaching

VISIBLE LEARNING – CHECKLIST FOR PLANNING

11. Teachers talk with each other about the impact of their teaching, based on evidence of student progress, and about how to maximize their impact with all students.

One of the major messages from *Visible Learning* is the power of teachers learning from and talking to each other about planning – learning intentions, success criteria, what is valuable learning, progression, what it means to be 'good at' a subject. Black, Harrison, Hodgen, Marshall, and Serret (2010) found that asking teachers 'What does it mean to be good at [English, math, etc.]?' was a powerful way in which to engage in a discussion about validity and curricular matters. They noted that teachers readily engaged in this debate, and 'through such engagement began to see that they had, in their practice, neglected to critique their own work in the light of their beliefs and values concerning the purpose of learning in their subject' (p. 222). Only by having some common understanding of what it means to be 'good at' something can the resulting debates about forms of evidence, quality of teaching, and student outcomes make sense. This can then lead to a more informed discussion about what progression means – which is at the core of effective teaching and learning. Sharing a common understanding of progression is the most critical success factor in any school; without it, individualism, personal opinions, and 'anything goes' dominate (usually in silence in staffrooms, but living and aloud behind each closed classroom door). Miller (2010) refers to the 'smart swarm' that occurs when all begin to move in the right direction based on collaborative critique, distributed problem-solving, and multiple interactions.

Finding ways in which to have this discussion about progression is the starting point, the sustenance of any school. This requires many methods: moderation; sharing indicators of milestone performance (using examples of student work); sharing marking across classes; collaborative pre-planning across, as well as within, year cohorts. The most successful method that I have encountered is the 'data teams' model, in which a small team meets a minimum of every two or three weeks and uses an explicit, data-driven structure to disaggregate data, analyse student performance, set incremental goals, engage in dialogue around explicit and deliberate instruction, and create a plan to monitor student learning and teacher instruction. These teams can work at the grade level, curriculum or department level, building level, and even system level. These teams allow focus and deep implementation. Says Reeves (2010: 36): '. . . half hearted implementation was actually worse than minimal or no implementation.'

McNulty and Besser (2011) argue that data teams be formed on the basis of three criteria:

- all teachers on an instructional data team have a common standard or common area of focus;
- all teachers on an instructional data team administer a common assessment that leads to regular formative interpretations; and

- all teachers on an instructional data team measure learning with a common scoring guide or rubric.

They then see the data team model as a four-step process.

1. The first step involves collecting and charting the data, the aim of which is to make the data visible, to place a name for every number, to develop trust and respect to spark improvement from all, and (most importantly) to work out the fundamental questions to be asked of the data team.

2. Next, the team begins to use the evidence to prioritize and set, review, and revise incremental goals. This involves being explicit about what success looks like, what high expectations need to be set, and what degree of acceleration is needed to enable all students to reach the success criteria.

3. The team now questions the instructional strategies and how they are impacting on each student, what needs to change, what needs to remain, and (most importantly) what results would convince the team to change or remain. Such 'results indicators' allow teams to make mid-course corrections.

4. Finally, the team monitors the impact of these strategies and the impact on student learning.

The cycle then repeats.

> The essence of data-driven decision making is not about perfection and finding the decision that is popular, it's about finding the decision that is most likely to improve student achievement, produce the best results for the most students, and promote the long-term goals of equity and excellence.
>
> (Reeves, 2011: 24)

There are now many sources that illustrate such data teams in action (such as Anderson, 2010, 2011).

There are many other systems, like data teams, which focus on the evidence of student learning and then create debates about impact, effect, and consequences. Darling-Hammond (2010) has elaborated on instructional data teams; DuFour, DuFour, and Eaker (2008) have argued that teams work together to clarify the learning intentions, monitor each student in a timely manner, provide systematic intervention, and check to see that all reach the success criteria.

The 'response to intervention' model, and instructional rounds pioneered by Elmore, Fiarmen, and Teital (2009) involve the student and the teacher in the presence of content. The model is based on seven principles, as follow.

1. Increases in student learning occur only as a consequence of improvements in the level of content, teachers' knowledge and skill, and student engagement.

2. If you change any single element of the instructional core, you have to change the other two.

3. If you can't see it in the core, it's not there.

4. Task predicts performance.

5. The real accountability system is in the tasks that students are asked to do.

6. We learn to do the work by doing the work, not by telling other people to do the work, not by having done the work at some time in the past, and not by hiring experts who can act as proxies for our knowledge about how to do the work.

7. Description before analysis; analysis before prediction; prediction before evaluation.

The message is not about whether we form professional learning communities, use smart tools, or conduct data teams; rather, it is about teachers being open to evidence of their impact on students, critiquing each other's impact in light of evidence of such impact, and forming professional judgements about how they then need to – and indeed can – influence learning of all students in their class. So often, the process becomes a mantra and allows for lovely meetings that have little effect other than providing a forum for the talkative to wax lyrical. The message is, however, about the impact.

One early reviewer (Rick DuFour) of the book identified three 'big ideas' from *Visible Learning*, as follows.

1. The fundamental purpose of schools is to ensure that all students learn and not merely that all students are taught. Student learning must be lens through which educators look when examining all of their practices, policies, and procedures.

2. Schools cannot help all students to learn if educators work in isolation. Schools must create the structures and cultures that foster effective educator collaboration – collaboration that focuses on factors within our sphere of influence to impact student learning in a positive way.

3. Schools will not know whether or not teachers are learning unless they are clear on what students must learn, and unless they continuously gather evidence of that learning, and then use the evidence:

   a. to better meet the needs of students through systematic instruction and enrichment; and

   b. to inform and improve the individual and collective professional practice of educators.

The reviewer then provided parallel arguments for the importance of collective responsibility, for the topics of debate in professional learning communities, and to bring these three 'big ideas' to life through a recursive process that focuses on four critical questions for every unit that they teach.

1. 'What is it that we want our students to know and be able to do as a result of this unit?' (Essential learning)

2. 'How will they demonstrate that they have acquired the essential knowledge and skills? Have we agreed on the criteria that we will use in judging the quality of student work, and can we apply the criteria consistently?' (Success indicators)

3. 'How will we intervene for students who struggle and enrich the learning for students who are proficient?'

4. 'How can we use the evidence of student learning to improve our individual and collective professional practice?'

These questions are the critical topics for professional learning, communities, data teams, or whatever the form of collective responsibility in our schools. These are the value propositions that we need to highlight about the impact of our schools. These are the most promising strategies for developing the capacity of people within our schools to assume collective responsibility for improving student and adult learning.

If there is any inference throughout these pages that it is the teachers who are responsible for all students learning or not learning, then this is not intentional. Given the range of students for whom schools are responsible, the expanding curricular and social expectations continually placed on schools, and the press, which can point laser-like attention on accountability in schools, it is not reasonable to assume that a single teacher knows everything. It is a collective, school-wide responsibility to ensure that all students are making at least a year's growth for a year's input, and to work together to diagnose, recommend interventions, and collectively evaluate the impact of teachers and programs.

It would be powerful not only to attend to within-school differences in teachers' conceptions of progression, but also to between-school methods. In our own work, my colleagues and I have invited teachers to engage in a 'bookmark' standard-setting exercise. We provide teachers with booklets of about 50 items ordered on the basis of student performance ('easiest' to 'hardest'). We asked them first to complete each item individually, and then to place a 'bookmark' (a sticky label) between the item that demarcates the change between the previous set of items and the next set of items at key reference points. (In New Zealand, the reference points are levels, because the national curriculum is based on levels of schooling rather than years – but the reference points could comprise years of schooling or other milestone points.) We then displayed on an overhead projector the item that each teacher chose as the demarcation item, and created a discussion of the nature of the skills and strategies that led them to claim that the items before and after this cut-item differed. This certainly led to a robust discussion, after which the teachers were asked to repeat the task – but this time in groups of between three and five – and then to repeat the discussion. This method is powerful for generating debate (in a reasonably safe environment) about what teachers see as progression, and what they see as the skills and strategies underlying this progression; an added benefit is that this leads to greater consistency in judgements across schools.

For example, we ran a series of workshops ($N = 438$ teachers) aimed at determining the level of performance on a set of reading items. Teachers were asked to answer 100+ items and then place bookmarks between sets of items that best represented their concept of Level 2 of the New Zealand curriculum (usually completed by years 4 and 5 students) and Level 3 (years 6 and 7), up to Level 6 (years 11 and 12). During the first round, they did this independently and their results were then shown to all teachers in the group. After listening to each other's reasoning about the skills and strategies that underpinned their decisions, they completed a second round in groups of four or five teachers.

The mean item at each level hardly changed across the teachers – indicating that, on *average*, teachers in New Zealand have similar conceptions of the *levels* of the curriculum. But the *variability* among the teachers dramatically reduced (by 45 per cent) after they listened to each other. By simply undertaking this exercise, the judgements made by

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teachers as to what is meant by student work at different levels of the curriculum became much more consistent. No longer would judgements about levels of performance be based on individual teachers' beliefs, but there could now be assurance that there were more common conceptions of proficiency and progress.

Coaching teachers to talk to each other about the impact of their teaching

Talking is one thing; action is the other. To put the ideas in this book, for example, into action requires having an intention to change, having knowledge of what successful change would look like, and having a safe opportunity to trial any new teaching methods. This often requires some specific coaching. Coaches can serve as 'suppliers of candour, providing individual leaders with the objective feedback needed to nourish their growth' (Sherman & Frea, 2004). Thus coaching is specific to working towards student outcomes. It is not counselling for adults; it is not reflection; it is not self-awareness; it is not mentoring or working alongside. Coaching is deliberate actions to help the adults to get the results from the students – often by helping teachers to interpret evidence about the effect of their actions, and providing them with choices to more effectively gain these effects. There are three elements: the coach; the coached; and the agreed explicit goals of the coaching.

Joyce and Showers (1995) showed the powerful impact of coaching in comparison with other methods for raising understanding, skill attainment, and application. Reeves (2009) has used coaching extensively to facilitate school-based change and he starts from the position that not all coaching is effective. He considers that it is more effective when there is agreement that the focus is on improved performance, when there are clear and agreed learning and performance lesson plans, when there is then specific, relevant, and timely feedback, and when there is an agreed exit from the coaching upon specific planned conclusions. Coaching involves empowering people by facilitating self-directed learning, personal growth, and improved performance.

PEBC Coaching Model

TABLE 4.4 Impact of various methods of training on outcomes

COMPONENT OF TRAINING	UNDERSTANDING	SKILL ATTAINMENT	APPLICATION
Theory understanding	85%	15%	5–10%
Demonstration	85%	18%	5–10%
Practice and feedback	85%	80%	10–15%
Coaching	90%	90%	80–90%

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A well-known method to get teachers talking to each other about teaching

One of the more successful methods for maximizing the impact of teaching and enabling teachers to talk to each other about teaching is direct instruction. I know that many teachers find the mention of this phrase anathema to their concepts of desirable methods, but this is because it is so often incorrectly confused with transmission or didactic teaching (which it is not). It is unfortunate that many implementations of direct instruction are based on purchased, pre-scripted lessons, which certainly undermines one of its major advantages – that is, teachers working together to create the lesson planning. The message here is not to prescribe this as 'the way' (although its average effect size of $d = 0.59$ places it among the more successful programs of which we are aware), but to introduce it as one method that demonstrates the power of teachers working together to plan and critique a series of lessons, sharing understanding of progression, articulating intentions and success criteria, and attending to the impact on student and teacher learning.

The method is more fully outlined in many places (including Hattie, 2009: 204–7). First outlined by Adams and Engelmann (1996), direct instruction involves seven major steps.

1. Before the lesson is prepared, the teacher should have a clear idea of what the *learning intentions* are: what, specifically, should the student be able to do/understand/care about as a result of the teaching?

2. The teacher needs to know what *success criteria* of performance are to be expected, and when and what students will be held accountable for from the lesson/activity. As importantly, the students need to be informed about the standards of performance.

3. There is a need to *build commitment and engagement* in the learning task – a 'hook' to grab the student's attention such that the student shares the intention and understands what it means to be successful.

4. There needs to be guides to *how the teacher should present the lesson* – including notions such as input, modelling, and checking for understanding.

5. *Guided practice* involves an opportunity for each student to demonstrate his or her grasp of new learning by working through an activity or exercise – such that the teachers can provide feedback and individual remediation as needed.

6. *Closure* involves those actions or statements that cue students that they have arrived at an important point in the lesson or at the end of a lesson, to help to organize student learning, to help to form a coherent picture, to consolidate, to eliminate confusion and frustration, and to reinforce the major points to be learned.

7. *Independent practice* then follows first mastery of the content, particularly in new contexts. For example, if the lesson is about inference from reading a passage about dinosaurs, the practice should be about inference from reading about another topic, such as whales. The advocates of direct instruction argue that the failure to follow this seventh step is responsible for most student failure to be able to apply something learned.

Direct instruction demonstrates the power of stating the learning intentions and success criteria up front, and then engaging students in moving towards these. The teacher needs

[Handwritten margin notes:]
Hook = mini Lesson
Student work Time
Reflection (debrief)
Connection: Lesson study model
Connection: Workshop teaching cycle

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to invite the students to learn, needs to provide much deliberate practice and modelling, and needs to provide appropriate feedback and multiple opportunities to learn. Students need opportunities for independent practice, and then there need to be opportunities to learn the skill or knowledge implicit in the learning intention in contexts other than that in which it was directly taught.

There are two big messages from the *Visible Learning* research relating to direct instruction. The first is the power of *teachers working together critiquing their planning*. This raises the question of how to construct schools in which teachers talk to each other about teaching – not about the curriculum, students, assessment, conditions, or kicking footballs, but about what they mean by 'challenge', 'progress', and 'evidence of the effects anticipated and gained from the lessons'. It is the critique that is powerful; purchasing ready-made scripts defeats a major source of the power of this method.

The second message is the power of designing and evaluating *lesson scripts*. Fullan, Hill, and Crévola (2006) term these 'critical learning instructional pathways' (CLIPs). Their CLIPS include day-to-day detailed pathways from particular parts of the progression to others. Different students can start at different starting points and make different progress along these paths. The paths need to be built on the multiple ways in which students can learn, and allow for deviations to go back and try a different pathway to achieve progress. There is a high need for rapid formative interpretations of progress and feedback to the teacher and to the student on the success of how teachers are implementing their teaching, such that there is forward movement along the pathways in terms of student learning. Obviously, CLIPs require a very detailed understanding of learning in the domain, and require collaborative study of student progress in specifying these paths, and so on. The professionalism of teachers resides in their evaluative ability to understand both the effect of their interventions, and the status and progress of all of their students. (See Steve Martin's lesson planning as one example, at pp. 54–5 above.)

There are some exciting syntheses of various intervention programs that are leading to more evidence-based scripts. Brooks (2002) has provided a systematic analysis of the effects of about 50 scripted reading programs in the UK. Snowling and Hulme (2010) show how to connect from the excellent diagnosis of a reading problem to the optimally matched intervention. They indicate how to identify 'poor responders' to the intervention, the value of a tiered approach to intervention as the student changes during the treatment, the importance of the degree of implementation or dosage of the intervention, and how to use the results from the intervention to improve the teacher's theories about reading difficulties. Elliot (see the preface to this book) would be pleased.

Conclusions

The co-planning of lessons is the task that has one of the highest likelihoods of making a marked positive difference on student learning. This chapter has identified a number of factors that together impact on the quality of this planning: having a good system of reporting student prior attainment to help teachers to know the prior achievement and progress made by each student – and 'knowing prior achievement' means not only recognizing the cognitive performance of students, but also their ways and levels of thinking, and their resilience and other self-attributes (such as confidence, reaction to failure and success). Other critical factors include setting targets for what is desired for each student

from the lessons, concentrating on evidence of the progress from prior achievement to target, and working with other teachers before delivering the lessons to engage with their critique as to how to optimize the impact of the lessons on the learning of the students. So often, planning involves a solitary teacher looking for resources, activities, and ideas; rarely are these plans shared. By sharing in the planning process, the likelihood of an end-of-lesson sharing of the evidence of impact and the understanding, and the consequences of relating this evidence to the planning, is more likely to occur.

Two powerful ways of increasing impact is to know *and* share both the learning intentions and success criteria of the lesson with students. When students know both, they are more likely to work towards mastering the criteria of success, more likely to know where they are on the trajectory towards this success, and more likely to have a good chance of learning how to monitor and self-regulate their progress.

There are many related notions to learning intentions and success criteria, such as target-setting, having high teacher and student expectations, helping students to set mastery as well as performance goals, setting personal bests, and ensuring that the intentions and criteria are sufficiently challenging for all students – and a major message in this chapter is that these notions apply as much to the teacher as they do to the students. The nature of the intentions can relate to surface or deep learning, and this choice depends on where students are in the cycle, from novice, through capable, to proficient.

Exercises

1. Create a concept map *with your students* about the learning intentions, the relations between these, and the ideas and resources that they are going to experience, and share notions of what success in the lessons would look like.

2. Hold a staff meeting in which teachers bring along their lesson plans. In pairs, choose a learning intention and its related activity, and create a 'child-speak' learning intention and related success criterion. Get each pair of teachers to read out the original learning intention, then the success criterion, and rework these until all agree. Then match the learning intentions with the learning resources (are they matched, efficient, etc.).

3. After about half a term, hold a feedback meeting in which every teacher gives a presentation based on the effects of sharing learning intentions and success criteria, as outlined in Exercise 2, including successes, problems, and strategies to overcome difficulties.

4. Choose three students who do not seem to be 'getting it' in a subject that you are teaching. Develop a profile of their self-processes – that is, their self-efficacy, self-handicapping, self-motivation, self-goals, self-dependence, self-discounting and distortion, self-perfectionism, and social comparison. Choose a student for which any of these processes are not optimal, devise an intervention, then monitor the impact on the students and their learning.

5. Make the presence and value of learning intentions and success criteria high profile in the school by talking about them in assemblies, with the aim that students and teachers see that this is a whole-school approach with a shared language.

6. Interview students about what 'challenge' means to them: what are some examples of lessons that have been challenging and how committed were they when asked to meet these challenges? Interview teachers about the same and see the overlap.