**The Art & Science of Teaching - Robert Marzano** **Workshop** at Hawker Brownlow Teaching & Learning Conference May 21, 2011

Please note: these are the notes taken during the presentation – presenter’s comments & ideas in black, my thoughts (Anne Doody), connections etc in blue.

‘There is no strategy that is a silver bullet’. There never can be – every teacher has to try things and build strategies that work for them.

And never stop trying new things.

BUT highly effective teachers do a lot of things the same. These can be observed over time, reflected upon, and then replicated to improve one’s own practice.

Marzano doesn’t believe that teachers are only born to it, but does think that some people have a natural talent that gives them a head start.

10 year / 10 thousand hour rule – it takes this long to practice to build expertise. A lot of people stop pushing them selves to improve as soon as they feel competent. Teachers who stop there, are more likely to burn out in the profession.

‘Even small increments in teacher effectiveness can have a positive effect on student achievement.’ If a teacher in the middle of the bell curve in terms of teaching expertise would pick just ONE or TWO things to improve each year – it would significantly lift student achievement in their classes.

We all know that research shows that Teacher Pedagogical Skill has an impact on Student Achievement, so-

What must a district or school do to get this to happen?

* Develop common language around teaching / pedagogy (use e5, Polt or VIT standards? Marzano’s Dimensions of Learning?)
* Provide opportunities for focused feedback and practice
* Provide opportunities for observing & discussing effective teaching
* Require individual teacher growth and development plans annually

Robert then mentioned 4 Domains for Common language of teaching – The first was – Classroom strategies & behaviours, but I didn’t get the other three down quickly enough. I need to check the others in “The Art & Science of Teaching’ text.

**Analogy of a History teacher once observed** – on first observation it would appear that the teacher undertook classroom strategy that most would consider unacceptable. He had the students sit every day in a seating plan, from best ranked student to lowest ranked student. The last row of students was known as ‘SKID ROW’. (!) While our first reaction might have been that this was outrageous, the reality was that this teacher had a great rapport with his students, used great humour with them, and daily challenged those on Skid Row to challenge other students in the class, and they would then exchange places. Thus, students were constantly moving in and out of Skid Row, and it actually became a motivating factor for them. His students really loved this teacher, and they always performed strongly on any testing. (Robert was not sure that he would advise the use of this strategy by others, though!)

Advice – start with a researched framework – (preferably his), but could also use e5, Polt etc – but then make it your won as you work with it over time.

At this point, he mentioned the work of John Hattie – and that he is currently focusing on ‘feedback’. Robert’s explanation was that Hattie would say that schools should be characterized (identified?) by the quality of feedback that students and teachers receive in the environment. Question – how would our schools go if this were the criteria for ranking of schools – on MYSCHOOL website for example? He also mentioned that currently, he feels that there is a real lack of feedback provided to teachers. This reflects ideas from Ben Jensen’s papers available from the Gratton Insitute –‘What teachers want’.

**Hierarchy of data types for teachers:**

* Teacher self-perception data – where teachers score themselves (unobtrusive)
* Teacher self observation data ( can also be unobtrusive)
* Observation from peers, instructional coaches, supervisors etc (more obtrusive)

**Teachers can rate themselves against any strategy using:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Innovating | Applying | Developing | Beginning | Not Using |
| (New?) Strategies are created / utilized to meet the needs of specific students or class as a whole. | Strategy (s) used and monitored to see if having the desired effect. | Strategy used, but in a mechanical way (with no evaluation of effect) | Strategy used by pieces missing. | Strategy called for, but not in play. |

\*Important that teachers only choose ONE or TWO things to work on each year. This is probably great advice at all levels – eg. how many priorities / goals etc do whole school annual action plans aim for in a particular year?

\*It really helps if teacher chart their growth over time so that they can visualize the improvement that their efforts are producing.

**Teachers should be encouraged to videotape their own lessons and score their own level of expertise** – even if they never show anyone else the tape – this can be a really powerful method of self-reflection.

**‘Walk Throughs’** – very common in primary settings – only takes 3 – 5 minutes per classroom. The original intent of introducing these was to make it familiar for people to be coming in and out of the classroom. It became an important method of providing feedback to teachers.

\*The person doing the ‘walk through’ needs to NOT expect to see a particular strategy at the very moment that they walk through – it may have occurred at a time when they were not there. They MUST consider the context – what are they viewing at that time – routines in the classroom, content delivery, or an ‘on the spot’ event?

**Comprehensive observation** - (coaching model)

* Set up with a pre-conference
* Focus on a specific element of effective teaching
* Stay for a ‘whole’ teaching period / module / lesson
* Provide quality feedback regarding the quality of what the agreed ‘effective teaching element’ was.

**Cueing Teaching** – for use with people who may have been identified as needing assistance OR in danger of exiting the profession.

Again, must focus on only ONE or TWO things at any one time – a supervisor or coach sits in ( or team teaches) and gives agreed ‘signals’ when appropriate to assist teacher to know / understand when something is not working, or when they need to utilize a particular strategy. EG. when to pay attention to a particular group, when students are becoming disengaged, when it is time to move on because students already ‘get it’ etc. The ‘signals’ can be:

* A ‘look’ that the teacher can recognize
* Proximity – the guiding person moving to a particular position
* Subtle signals like ‘T” with hands – for Time Out needed etc

\*Important to identify the cues with the teacher beforehand – big advantage of this approach is that it provides REAL TIME feedback.

**QUESTION put to participants –**

What is the role of Student Feedback in improving teacher practice?

* student surveys can be tailored to be specific about instructional strategies and their effectiveness
* need to keep in mind that some students will judge teachers negatively – (because they can), and some will be overly complimentary – overall responses still useful

\*This was the place of the POLT student surveys that weren’t ever really taken up in our Catholic schools, although they are now embedded practice in some government schools.

Robert’s Number 1 important thing is for teachers to have the ‘HEART AND DESIRE TO BE A GOOD TEACHER.’

**Instructional Rounds** – referred to Elizabeth ? (missed the surname)

* team guided by a lead teacher
* can be a short or long process
* primary purpose is to compare and contrast own practice with observed practice
* might be used to provide feedback to the person being observed, but not necessarily.

Explanation – a teacher with best practice (or good practice) is observed, (in person or through video etc) then the group discusses it:

* What did you see?
* Then, ased on what you saw – what will you continue to do?
* What questions do you now have?
* What new things will you try?

The questions here strongly align with the coaching model GROWe or FLOW models.

Using Instructional Rounds can feel risky at first, but can be transformational for teachers.

Teachers (often) don’t want to ‘coach’ others, or to ‘be coached’ by others, but they do want to see others teach. (YES!)

**Expert coaches** – Robert didn’t explain this in detail, as it is the subject of other complete workshops. (not that I get to attend at this event though)

**Expert videos** – this fitted very closely with the Instructional Rounds above – the use of video clips especially to demonstrate particular aspects of practice.

**Teacher – Led Professional Learning** – internal sessions in schools – especially if you can have students involved. EG on a designated PD day, have some students volunteer to be there for teachers to see how their teacher teaches them. (Gets around the timetable issue of releasing teachers at various times to observe others by putting it on a particular day. Also involves internal PD where teachers share something that they do with others without students being involved during the PD.

**Virtual communities** – for example, the proposed use of eLLUMINATE by VCAA, online teacher communities where ideas and practice can be shared. This will become an increased part of what we do in the future.

In ‘Art & Science of Teaching’ – can start with 10 basic questions. In the handouts, there were templates for teachers to use to self-reflect. Within the templates, each question was broken down to some more specific elements. (Included in orange.)

1. What do I / will I do to establish and communicate learning goals, track student progress and celebrate success?

* What do I typically do to provide clear learning goals and scales (rubrics)?
* What do I typically do to track student progress?
* What do I typically do to celebrate success?

1. What do I / will I do to help students effectively interact with new knowledge?

* What do I typically do to identify critical information?
* What do I typically do to organize students to interact with new knowledge?
* What do I typically do to preview new content?
* What do I typically do to chunk content into ‘digestible bites’?
* What do I typically do to help students process new information?
* What do I typically do to help students elaborate on new information?
* What do I typically do to help students record and represent knowledge?
* What do I typically do to help students reflect on their learning?

1. What do I / will I do to help students practice and deepen their understanding of new knowledge?

* What do I typically do to review content?
* What do I typically do to organize students to practice and deepen knowledge?
* What do I typically do to use homework?
* What do I typically do to help students examine similarities and differences?
* What do I typically do to help students examine errors in reasoning?
* What do I typically do to help students practice skills, strategies, and processes?
* What do I typically do to help students revise knowledge?

1. What do I / will I do to help students generate and test hypotheses about new knowledge?

* What do I typically do to organize students for cognitively complex tasks?
* What do I typically do to engage students in cognitively complex tasks involving hypotheses generation and testing?
* What do I typically do to provide resources and guidance?

1. What do I / will I do to engage students?

* What do I typically do to notice when students are not engaged?
* What do I typically do to use academic games?
* What do I typically do to manage response rates?
* What do I typically do to use physical movement?
* What do I typically do to maintain a lively pace?
* What do I typically do to demonstrate intensity and enthusiasm?
* What do I typically do to use friendly controversy?
* What do I typically do to provide opportunities for students to talk about themselves?
* What do I typically do to present unusual or intriguing information?

1. What do I / will I do to establish and maintain classroom rules and procedures?

* What do I typically do to establish and maintain classroom rules and procedures?
* What do I typically do to organize the physical layout of the classroom?

1. What do I / will I do to recognize and acknowledge adherence or lack of adherence to rules and procedure?

* What do I typically do to demonstrate ‘withitness’? ( This is the ability to ‘tune into’ or ‘be aware’ of what is going on, how the class is progressing, without it being articulated to you – ‘sixth sense’.)
* What do I typically do to apply consequences for lack of adherence to rules and procedures?
* What do I typically do to acknowledge adherence to rules and procedures?

1. What do I / will I do to establish and maintain effective relationships with students?

* What do I typically do to understand students’ interests and backgrounds?
* What do I typically do to use verbal and nonverbal behaviours that indicate (appropriate) affection for students?
* What do I typically do to display objectivity and control?

1. What do I / will I do to communicate high expectations for all students?

* What do I typically do to demonstrate value and respect for low expectancy students?
* What do I typically do to ask questions of low expectancy students?
* What do I typically do to probe incorrect answers with low expectancy students?

1. ??? Not in the handout – need to consult the actual text.

\*Questions 2,3 & 4 are the basis of ‘Dimensions of Learning’ another publication by Marzano.

Excellent self-reflection questions for teachers – could be used just to identify areas of strength in practice, and areas to set future goals for further improvement. They align with the e5 framework – provide definitions of, and clarification of, what best practice ‘looks like’ through the explicit language and elements.

At this point, Robert quoted Robert Rosenthall:

**‘ Expertise happens in thin slices of behaviour’.**

Great description – helps us to think about how many teachers can be trying the same things / strategies – there is something in the subtle ways in which they are enacted that creates the effective learning environment. The challenge is to assist all teachers to achieve the positive results.

\*Importance of teachers saying ‘THANK YOU’ when they see students / classes exhibiting behaviours that they want to see. EG. You stayed focused today – Thank you; You finished the task completely – Thank you. Etc.

**3 Fundamental Segments of Classroom Instruction:**

* ROUTINES – that provide clarity and processes to assist learning and promote a strong learning environment
* CONTENT SPECIFIC
* ‘ON THE SPOT’ segments – things not planned for the particular lesson, but the teacher is ‘prepared’ if it does happen. Eg. using ‘radar’ to know if students are tuned in – and reacting accordingly.

**3 types of CONTENT:**

* NEW KNOWLEDGE
* DEEPENING KNOWLEDGE AND SKILLS
* GENERATING AND TESTING KNOWLEDGE

When we are observing practice (our own or someone else’s) we need to ask ourselves:

‘What am I observing, right now?’

* Is it a routine?
* Is it content-based?
* Is it an ‘on the spot’ reaction?

**Routines include:**

* Rules and procedures
* Communicating learning goals
* Tracking student progress
* Celebrating success

**Power of Common Language** around teaching practice – unless we have this, it is difficult to discuss to improve.

What strategies do teachers use when introducing new knowledge?

Eg. brainstorming, previewing, chunking, KWLs, more direct teaching etc.

BUT there is a danger in having lists of strategies that you may or may not see when you observe – they may have occurred before, or after, your observation.

\* I’m not sure whether it is a good or bad thing, but many teachers don’t always know the jargonistic names of some teaching tactics / strategies that are commonly used in literature about teaching practice. This doesn’t necessarily mean that they don’t ‘do’ the strategy, but that they don’t use the same language around it.

Engagement – this has elements of it’s own, but is also tightly linked to ‘on the spot’ activities.

END OF SESSION

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