Learner and Teacher Agency

REFLECTIVE THINKING CURRICULUM

Learning Intentions for teachers and students:

- Teachers and students will understand the crucial contribution that Reflective Thinking makes to improving and enhancing student outcomes

- Teachers and students will acquire, refine and extend the tools, skills and attitudes that will enable them to self-assess and reflect effectively throughout their lives.

Big Ideas: Reflective Thinking, Metacognitive Thinking, Self-assessment, Peer assessment

Definitions:

- Reflective Thinking: consideration of beliefs, learning and thinking beyond face value (Wilson & Wing Jan 1993:134)
- Metacognitive Thinking and Learning: the knowledge learners have about their own thinking processes and strategies, and their ability to monitor and regulate these processes. (Wilson & Wing Jan 1993:134)
- Self-assessment involves students analysing and evaluating their learning progress during and after a learning experience.
- Peer Assessment involves peers analysing and evaluating their peers' learning progress during and after a learning experience.

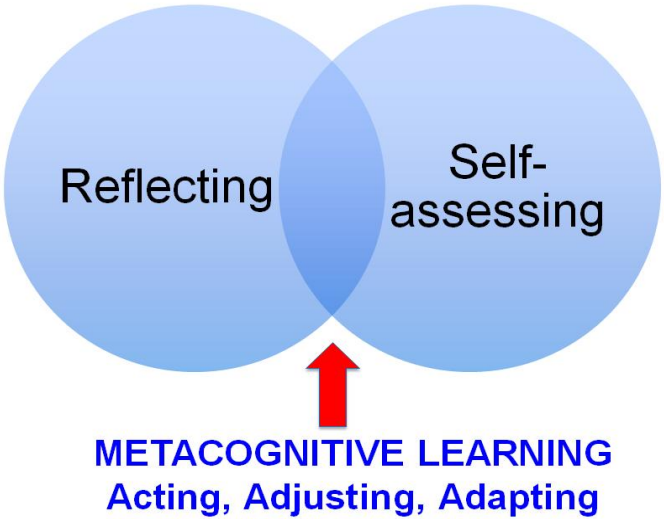

Diagram 1: Metacognitive learning takes place when the student has reflected, analysed and evaluated their performance and implemented an improvement strategy.

Supporting Materials:

Australian Curriculum v8.3: Critical and Creative Thinking General Capability

Reflecting on thinking and processes
This element involves students thinking about thinking (metacognition), reflecting on actions and processes, and transferring knowledge into new contexts to create alternatives or open up possibilities. Students reflect on, adjust and explain their thinking and identify the thinking behind choices, strategies and actions taken. They apply knowledge gained in one context to clarify another. In summary, reflecting primarily consists of:

- think about thinking (metacognition)
- reflect on processes
- transfer knowledge into new contexts.

Deep Understandings:

Teachers and students will understand that:

- Reflective/Metacognitive thinking and the ability to self-assess is the most important learning disposition that any student can develop for life long, effective learning
- Reflective/Metacognitive thinking and the ability to self-assess has a strong research base (Wiggins 2012, Bruning 2004)
- Provisions for Reflective Thinking have been embedded in the Critical and Creative Thinking General Capability in the Australian Curriculum
- Students can effectively provide some of their own feedback/assessment through self regulation techniques
- Peer assessment is very powerful

Essential Questions

- What is Reflective thinking?
- How does the Australian Curriculum define Reflective Thinking?
- What do Reflective thinking and Metacognitive thinking have in common?
- What are the differences between Reflective thinking and Metacognitive thinking?
- What is Self-assessment and what forms can it take?
- How can Self-assessment be carried out effectively?
- What is Peer assessment and how can it be carried out effectively?
- Why is it important to acquire and apply these thinking skills to learning?

Teachers and students will know about the concepts, skills and strategies involved in Reflective/Metacognitive thinking.

Teachers and students will be able to use Reflective/Metacognitive skills and strategies efficiently and routinely.

Assessment:

- *Assessing Pupils' Personal Learning and Thinking Tools*: A continuum from Years 1 - 9 may be found in Ryan, 2011: 237-239. See below.
- *Reflection/Metacognition Checklist* (Wilson and Wing Jan 1993:135)

Reflective Tools	**Opportunities for use**
• Thumbs Up, Thumbs Down	• All year levels
• PMI (de Bono 2009)	• All Year levels
• Mrs Farrall's Questions (Farrall 2009) • RAA: Reflect, Analyse and Adjust (Farrall 2013) • Six Hat Review (Farrall 2001)	• Upper Primary – Senior Secondary • All year levels. Use it at the end of a Unit, a semester or a year
• Mrs Potter's Questions (Fogarty 1994: 212)	• All year levels. Especially suitable for Middle and Lower Primary
• 3:2:1:RIQ (Frangenheim 2013: 128) • PCQ: Pros, Cons and Questions (Frangenheim 2013: 260)	• Upper Primary – Senior Secondary • All year levels
• Habits of Mind Reflection Exit Tickets (Provenance Unknown) • Habits of Mind Reflection Sets (Provenance Unknown)	• All year levels. Especially suitable for end of a lesson • All year levels
• Why reflect? A Rationale for Reflective Thinking (Murdoch 2009: 4) • 10 Sentence Starters (Murdoch 2009:18) • Dear…Me (Murdoch 2009:19) • Thinking Hats On (Murdoch 2009: 49)	• All year levels • Especially suitable for Primary • Especially suitable for Primary All year levels

• Thinking Outside the Square (Murdoch 2009: 13 • Two Stars and a Wish (Murdoch 2009: 28)	• Especially suitable for Primary and Junior Primary
• A Taxonomy of Reflection (Pappas 2016)	• Can adapted for all year levels
• Learning Logs (Silver 2012: 72-73) • 1.2.3.4 (Silver 2012: 110) • Reflective Statements (Silver 2012: 114) • Reflecting in Style (Silver 2012: 115 – 116)	• All year levels
• Encouraging Self-Evaluation (Wiggins and McTighe 2006: 223)	• Can adapted for all year levels
Visible Thinking Routines • Compass Points • Connect Back: Understanding • Connect, Extend, Challenge Headlines I Used To Think..., But Now I Think.....	• All year levels
• Infant Self/Group Assessment Sheet (Wilson & Wing Jan 1993: 141) • KTLT: Know and Think, Learn and Think (Wilson and Wing Jan, 2008: 81) • POWWER: Predictions, Observations, Wows, Woes, Evaluation and Reflection (Wilson and Wing Jan, 2008: 82) • Self Questioning (Wilson & Wing Jan 1993, 77)	• Especially suitable for Junior Primary • All year levels

See References for recommended texts (below)

SOME REFLECTIVE TOOLS

Mrs Farrall's Questions for Metacognitive Reflection
1. What new knowledge did I learn from carrying out this task?
2. What skills did I acquire, develop or extend?
3. What do I understand better now about…..
4. What do I need to focus upon next?

RAA: Reflect, Analyse/Assess and Adjust	
Purpose of Strategy:	
A routine for reflecting, analysing and evaluating performance in order to learn from mistakes and adjust accordingly. This routine involves reflective thinking, self-assessment and metacognitive learning. It could be used at the end of a learning task or learning unit in any subject.	
Description of Strategy	
Carefully examine your assessed task and think upon the following questions: 1. What did I do well in this task? 2. What mistakes did I make? 3. How can I improve upon this next time? 4. Who can assist me? 5. What steps will I take? 6. How will I know when I have succeeded?	
Teaching Example	Year level: Ten
History: Sources Analyses tasks, essays and extended responses Philosophy: Extended responses.	

Six Hat Review (using de Bono's Six Hat model) Year 9 Philosophy

Instructions.

This review is to be completed thoughtfully and carefully, in complete sentences and proper paragraphs.

Questions.

1. What were three important things that you learned in Philosophy this semester?
2. What were the advantages of the Philosophy course? (Here you might like to discuss the lessons which you found the most useful or the most fun.)
3. What were the drawbacks of the Philosophy course? (Here you might like to discuss the lessons which you found the least useful or quite boring.)
4. What were your feelings about the Philosophy course? (Here you might like to discuss how you felt about the subject and how you felt in the classroom.)
5. In what ways could Philosophy be improved? (Try to be as constructive as you can.)
6. Assess your progress as a thinker and learner.
   In what ways did you make progress?
   What areas/skills need further work?

Visible Thinking Routines

Project Zero's Thinking Routine Toolbox

https://pz.harvard.edu/thinking-routines

Assessment: Assessing Pupils' Personal Learning Skills

This extract is taken from Ryan, W., 2011, *Inspirational Teachers, Inspiration Learners*, UK, Crown House Publishing

The grids below are referred to in Chapters 1 and 7. They seek to promote continuity and progression in the key personal learning and thinking skills children will need to develop if

they are to lead a fulfilled life in the twenty-first century – as reflective learners, team workers, creative thinkers, independent enquirers, self managers and effective participators.

Phase 1 equates to the levels that would be expected in the foundation stage.

Phase 2 equates to the levels that would be expected in Key Stage 1.

Phase 3 equates to the levels that would be expected in lower Key Stage 2.

Phase 4 equates to the levels that would be expected in upper Key Stage 2.

Phase 5 equates to the levels that would be expected in Key Stage 3.

(This is equivalent to Junior Primary, Primary and Middle School in Australia)

Reflective Learners

Reflective Learners (Phase 1)	**Score**
I can tell you what activities are on offer.	
I can choose an activity and select my resources with an adult.	
I can say what I am good at.	
I can play, listen and talk.	
I can give reasons for my ideas.	
I can say what I have done at the end of a task.	
I can say whether I worked well.	
I can recount my experiences to an adult.	
I know how to be fair.	
I know that it is important to try hard.	

Reflective Learners (Phase 2)	**Score**
I can decide how to do my work with friends and adults.	
With my friends I decide which resources I need and get them for	
I can say which bits of work I find easy or difficult.	
I can describe some of the different ways in which we learn.	
I reflect at the end of a task.	
I can say which things I did that worked well in a task and what I might do differently next time.	
I sometimes see links to previous experiences.	

I understand that I need to be positive to perform well.	
I know it is important to make the right choices in my work and in school.	

Reflective Learners (Phase 3)	**Score**
I look for two different ways to carry out a task and then chose one of them.	
Independently, I decide on what resources I need and then access them from the classroom or elsewhere in school.	
I can say what you need to get better at (including my personal	
I am aware of the different learning styles.	
I plan at which point to reflect on a task.	
I reflect on the task and suggest alternative approaches as necessary.	
I can use pre-existing skills and knowledge (sometimes when	
I can keep trying even when things are hard.	
I understand that using my initiative can be scary.	
I want to make a positive difference.	

Reflective Learners (Phase 4)	**Score**
I recognise the need to break down problems into steps.	
When planning I look for possible alternatives and eventualities.	
I can recognise the strengths and weaknesses in my plans.	
I know about the different learning styles and can choose a suitable learning style for the activity I am doing.	
I plan appropriate places in my work to stop, reflect and revise if necessary.	
I can use reflections on my work to plan my future learning.	
I use my previous learning to help me complete tasks.	
I reflect on how well I have completed a task and my level of understanding.	
I am excited by new challenges and the opportunities they provide.	
When considering issues with an ethical dimension I try to make a difference.	
I understand that using my initiative can be scary.	

Reflective Learners (Phase 5)	**Score**

I can break down problems into manageable steps and draw up an action plan which includes a variety of techniques.	
I plan out the resources I need before commencing a task.	
I can describe the skills and qualities I possess and how I am working to address weaknesses.	
I am flexible in my use of learning styles and select which ones to use according to the task.	
I plan when to stop and reflect on my progress in a task and revise my plans when necessary.	
Within my learning I make increasingly complex or abstract links to learning elsewhere.	
I can accurately assess the quality of my own learning.	
I do not focus on negative things unnecessarily and can move on.	
I use a positive attitude to get the best out of every situation.	
I can reflect on whether my actions have an ethical dimension and make decisions as a responsible citizen.	

Extract taken from `Inspirational Teachers Inspirational Learners` by Will Ryan, edited by Ian Gilbert

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To purchase copies of the book please visit:
https://www.amazon.com/Inspirational-Teachers-Learners-creativity-curriculum/dp/1845904435

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"What works in education – Hattie's list of the greatest effects and why it matters" in Wiggins, G., 2012, *Granted, and…~ thoughts on education* http://grantwiggins.wordpress.com/2012/01/07/what-works-in-education-hatties-list-of-the-greatest-effects-and-why-it-matters/

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Wilson, J and Wing Jan, L, 2008, *Smart Thinking: Developing Reflection and Metacognition*, Melbourne, Curriculum Corporation (Chapter 5 on Self-assessment is excellent) Highly recommended

Last updated by J. Farrall 2021
Please email Janet for a resource you cannot locate.

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