►THE NEXT 2 YEARS 2017-2018 STRATEGIC PLAN

VISION

"Students at Aviation High School pursue academic excellence and social responsibility in a safe, supportive , nurturing environment"

- ASOT/ school pedagogical framework
- Data plan
- Curriculum plan
- Performance conversations
- Peer mentoring
- Aviation context
- ACARA
- Arts
- Explicit teaching (Fleming)
- R2L

- Welfare program
- NAPLAN
- Junior secondary
- Local primary schools
- Student leadership
- Tutoring
- Learning support
- Student outcomes
- **Differentiation/U2B/Consistency and delivery of practice/putting Data on a face**

Where to from here 2017-18

- Successful Learners
- Engaged partnerships
- Great people
- High Standards
- All underpinned by EMPOWERMENT

Our Focus for the next 2 years

How does successful learners look in this school

- Focus on core learning priorities (reading , writing, numeracy and science) to ensure all students have solid foundations to effectively engage in the community

- Improve attendance, retention, attainment and transition of students at key points in their schooling journey

- Support whole –of- school approaches that effectively target resources to meet the needs of every student

Aviation High School priorities 2017-18

- DATA

- DIFFERENTIATION

- CONSISTENCY OF PRACTICE

- U2B

I do, we do, you do	Teacher	Student
I do **Explicit teaching of new knowledge**	• Provides direct instruction • Establishes goals and purpose • Models • Think aloud	• Actively listens • Takes notes • Asks for clarification
We do **Practicing and deepening knowledge**	• Interactive instruction • Works with students • Checks, prompts, clues • Provides additional modelling • Meets with needs-based groups	• Asks and responds to questions • Works with teacher and classmates • Completes process alongside others
You do – Individual Learning **Generating/testing hypothesis**	INDIVIDUAL LEARNING	
	• Provides challenges • High Order Thinking activities • Provides feedback • Evaluates success • Determines level of understanding	• Works alone • Relies on notes, activities and classroom environment to complete task • Takes full responsibility for outcome
You do **Generating/testing hypothesis**	COLLABORATIVE LEARNING	
	• Moves among groups • Clarifies confusion • Provides support	• Works with classmates, shares outcomes • Collaborates on authentic task • Consolidates learning • Completes process in small group • Looks to peers for clarification

For teachers

- Planning is more effective than winging
- Feedback is more focused and not general
- Working towards a common goal with students
- Allows students needs to be identified and differentiated for
- DATA at the core

Reflection and Feedback

- How will you know if students have understood the content of your lesson

- What strategies will you use to inform you about your lesson

- How will you give feedback to the students

The outside factors

▶Student engagement

▶Student relationships

▶Parent relationships

▶High expectations

▶Adherence to school rule and procedures

▶TEACHER at the core

Engagement

From:

- why aren't students more engaged ?

To:

- How can we make our classrooms more engaging?

Two questions for us as teachers:

- ▶ Are they engaged?
- ▶ Do I have their attention

Positive Teacher Demeanor

- Demonstrating enthusiasm- all the time
- Demonstrating intensity- some of the time
- Timing
- Verbal and non-verbal expressions
- Gestures

Research findings

- Are we asking the right questions or are we still in a 30 minute lesson asking on average 50.6 questions, students posed only 1.8 questions

- Most teachers questions are a the lowest cognitive level- known as fact, recall , or knowledge

- Not all students are accountable to respond to questions. Teachers frequently call on volunteers and these volunteers constitute a select group of students

- Teachers typically wait less than one second after asking a question before calling on a student to answer.

- Teachers often accept incorrect answers without probing, they frequently answer their own questions

- Students ask very few content related questions

- WHAT HAS CHANGED?

Deliberate Practice

▶ Begins with self –audit

▶ Teacher reflective practice should be occurring everyday

▶ Avoids automaticity

▶ The goal is to continuously strive to achieve mastery

▶ Going out of your comfort zone

▶ Trial and error

▶ Tiger Woods works on the not yet attained theory. He challenges himself to keep getting better

What will be your deliberate practice in 2017??????

▶By being deliberate in your practice you are engaging in the constant pursuit of excellence and growth

The big instructional picture

- Gradual release of responsibility model of instruction (GROR)

- Works as and when teachers shift teachers as models to joint responsibility of the teacher and student to independent practice and application by the learner

- Provides structure for teacher to move away from all responsibility for performing a task ……to student assuming all of the responsibility

- GROR has several theories: Piaget- 'working on cognitive structures and schema; Vygotsky- ' zones of proximal development'; Wood , Bruner,

- and Ross- 'scaffolded instruction'; Bandura- ' work on attention, retention reproduction and motivation'

How many times do I ask a question

- No response, panic all, blame all
- The real teacher in us steps up to the mark
- Simply telling students doesn't make it learning and doesn't result in long term automaticity
- Guided instruction though critical, is not sufficient to ensure long-lasting understanding
- Students need to experience modelling, engage in productive tasks with peers, and produce individual work
- It is about student consolidating and applying their learning

The theories suggest learning is interacting with others only when the interaction is intentional, that specific learning occur

➤ GROR/ Fleming framework includes:

Focused lessons-I do - purpose

Guided instruction- we do it- strategic questioning, cues and prompts

Productive group work- you do it together- consolidating thinking and understanding

Independent tasks-you do it alone- applying learned information to demonstrate confidence

So what is going on?

- As teachers, we have to be aware of the best ways to help students store and retrieve information

- "Worksheets don't grow dendrites'- (Tate 2003)

- Simply telling someone doesn't mean they understand- I say many things about how the school should be operating doesn't mean that it happens first time

- It is about moving information from short to long term memory

What is a teacher to do?

▶ We need to guide students to new levels of understanding and ensure that they have opportunity to practice and use the information so that it moves into long term memory

▶ Vygotsky's theory of 'The zone of proximal development' has been around for years and the initial studies where limited to individual. However researchers since then e.g. Ragoff (1990) and Rodgers (2004) have validated studies in the 70's that indicate that "adults support children's learning by structuring task's difficulty level, jointly participating in problem solving, focusing the learners attention to the task and motivating the learner"

Questioning for Understanding

- Most of us have been brought up with the teachers program around open/closed questioning

- Open elicits a longer response/ closed is a more specific response e.g. What is the answer to Q5?

- Both have purpose but one allows students to further engage

- Checking for understanding is the key to GI as the students response provides us with decision making points- do I do more or is further scaffolding required for the learner

Differentiation through Questioning

QAR- Question and Answer Relationships

► Robust Questioning

► Most questions conducted in classrooms discourse are known as IRE- Initiate, Respond , Evaluates

► Teacher Initiates Q- How many sides does a triangle have?- students responds-3- Teacher evaluates- correct

► Is IRE wrong- no- our roles as teachers are to evaluate responses. However what is our intentions in asking other than to keep score

- Evidence would suggest that this type of question lacks quality if we are simply looking at the recall of facts

- On the other hand if the Q is robust then it elicits more about what they know and don't know and how it is used and where confusion may lie

- Teacher-what is a nocturnal animal? Student -an animal that stays awake at night,

- Same questions same answers the teacher ask – tell me more about what you said. Does a nocturnal animal have special characteristics? Student responds with- "well it doesn't sleep a lot"!

- So this issue is revealed- misconception- the student made a reasonable answer, based on what he knows and doesn't know at this time and assume the animal is sleep deprived

- Nobody taught this but the student believes it to be true

- Probing by the teacher makes the difference- INTENT in using Q's to uncover a misconception- it is not a test

- Knowing this helps us as teachers with subsequent instruction because it provides information we need to adjust learning's, prompts, cues or model expectations

- It also helps to determine the extent to which students are beginning to use the knowledge they are learning- GRR model- gradual release of responsibility

- Moving students from early stage learnings to refining their understanding in the company of peers especially in group work

Robust Questioning

- requires students to problem solve and speculate

- elicit information, some invite students to link previous knowledge to new information

- encourage elaboration or clarification

- In GI – guided instruction has major types of Q's placed into categories

Elicitation Q

- Backbone of Q for GI

- Draws on skills and concepts previously taught

- Foundational and provides teachers with baseline information from which to work from

- Finite knowledge (e.g. – what is the name of the protective casing a caterpillar makes as it becomes a butterfly?)

- Application (level knowledge) Why does a chrysalis need to

- EQ – purpose is to gauge what the student has retained

- EQ- can expose misconceptions

Divergent Q's

- Link / couple previously taught knowledge with new knowledge

- Apply previous information to figure out something new

Elaboration Q's

- EQ is used to find out more about the students reasoning

- E.g.- teacher asks a science student about their prediction about what will occur if a piece of zinc metal is added to a salt solution and acidic solution (noting the students answer of nothing will happen- the teacher asks for more information about their prediction- tell me more)

Heuristic Questions- (Rule of thumb)

- ▶ We all do this everyday- where to park the cark, choosing the checkout lane at the supermarket

- ▶ This is developed over a period of time of time/experiences and conversations

- ▶ In the classroom you use this to determine the students ability to problem solve

- ▶ If I were looking for information on ??? I would look here

Inventive Questions

► Use of knowledge to speculate or create

► Emphasis on using information that students have recently been taught in order to create

► E.g. who would you recommend this book to?

QAR

► Designed to teach students how to locate and formulate answers based on specific types of Q's often asked about a piece of text

There are 4 types

- ▶ Right there

- ▶ Think and search

This is information in the text book

- ▶ Author and you

- ▶ On your own

This is information that is in your head

- ▶ The first 2 are both explicit meaning answers are found in the text

- ▶ Second 2 both implicit and the answers centre around formulations and connections

QAR

- Clarifies how students can approach the task of reading texts and answering questions

- Teaches students to locate and justify answers by showing how to identify 4 types of Q's

- Encourages learning to identify a Q type and its relationship to the text that helps students builds comprehension by monitoring and clarifying their reading

Consider the following student generated Q's

- Why are the early humans important to us to know about(think an search)

- Who were the early humans (right there)

- How were the early humans discovered (T and S)

- How would you adapt to their life (author and you)

- What were the ice ages (R and T)

- What do people today need to survive (on your own)

- These Q's allow the teacher to check for understanding of both content of what you read as well as their ability to find answers to Q's

Quality Questions

- Can we focus on a the Q process?

- By implementing a process we provide clues for the teacher to help guide the learner through prompts, cues, explanation and modelling

- Without a process the teacher can create Q's on the spot, that maybe lower level recall Q's that don't provide opportunities to clarify and extend student understanding

- Basically if we ask lots of recall Q's then students learn to read for that type of information- the type of Q's we ask matter

Durkin (78-79)- research

- Found that teachers rely primarily on Q's to teach comprehension, however it isn't Q's that teach comprehension it is us

- We have to do something with the respeonses we get to the great Q's we ask- it is not enough to simply ask!

- Walsh and Salt (2005) created a 5 step process

QUILT- questioning and understanding to improve learning

- ▶ Stage 1- prepare the Q- reflects purpose and context

- ▶ Stage 2- present the Q- response system, raise your hand, write, discuss- opportunities to respond

- ▶ Stage 3- prompt student responses- teachers need to pause before prompting or allow elaboration

- ▶ Stage 4- process student responses- feedback, cueing, is it an appropriate response or not

- ▶ Stage 5 – reflect on Q practice- analysing the Q, checking for understanding

- This process of Q provides the teacher with an approach to checking for understanding with the goal of addressing student needs through GI

- Summing up

- The core assumption of GI is that the student responses provide the teacher with insight into what the learner knows, does not know at this moment in time

- By posing robust Q's by the teacher exposes the student understanding or partial understanding requires anticipating misconceptions

- RQ's are purposeful and are designed to elicit information about previously taught concepts and to encourage linking previous knowledge to new

- In some cases further elaboration or clarification Q's are needed to unearth student knowledge

- RQ' can be used to give teachers insight as to how to solve academic problems and inventive Q's invite students to speculate

- QAR – instructional routines is relevant for showing students how they know the things they know

- RT and T&S Q's are explicit and answers found in the text

- A & Y and On your own Q's require students to synthesise knowledge found both within and outside the text

- Just as these techniques can be taught to students, so can the technique be used to improve Q's

- These techniques include planning Q in advance, providing wait time and using follow up probes to encourage further responses

- Responses then need to analysed in order to plan both immediate and further instruction

- It is this diagnostic intent that lifts Q's from merely keeping an account of correct and incorrect answers to more High Order guided instruction