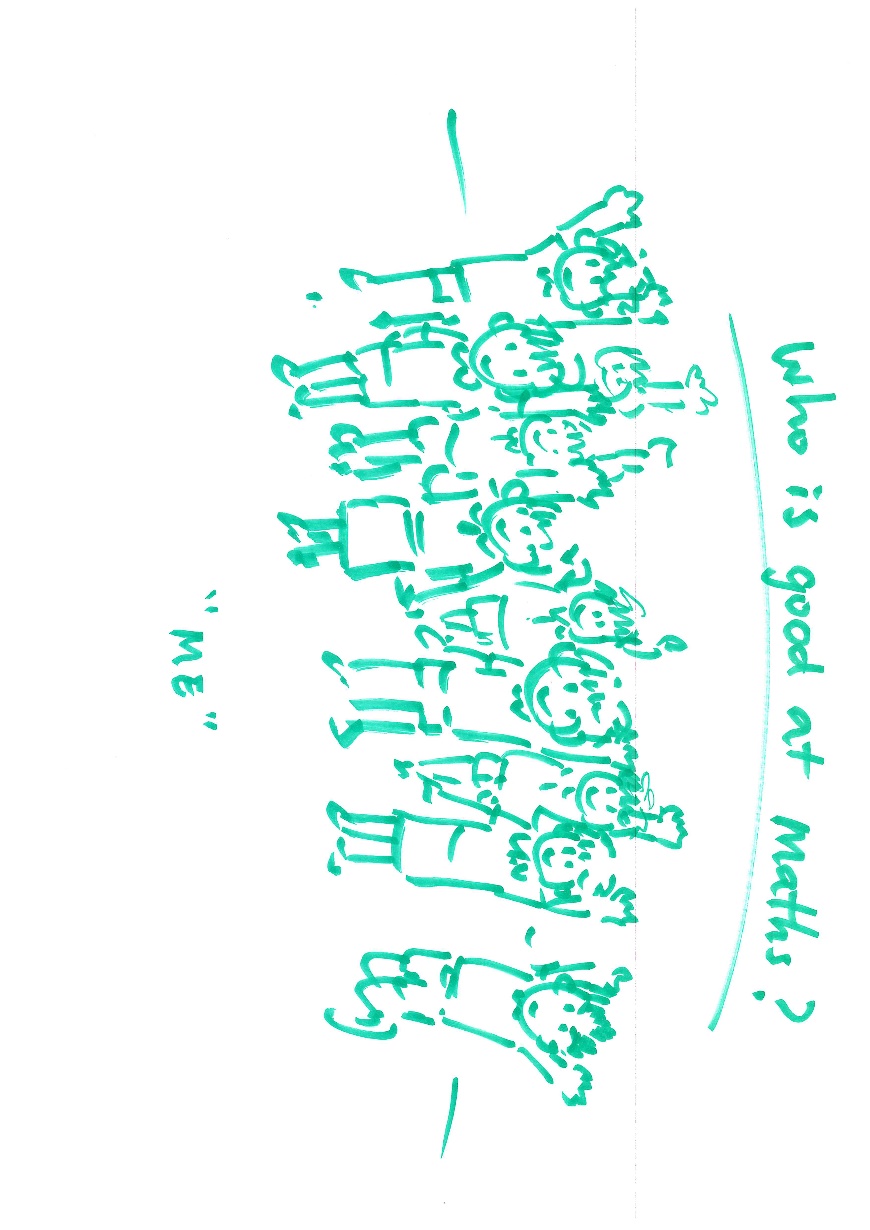
**The reSolve video in 18 months…**

* Free play at start
* Making the difference to traditional maths learning explicit to students
* Explicit language use, mathematical languages, expectation around it
* Build fluency through revisiting & reviewing the concepts
* Tasks involving maths concepts across strands – Gean & stats
* Breaking down the task over time
* Trusting environment – safe to have a go
* Believe the kids will get there in the end – don’t rescue
* Share different approaches – ways + valuing many
* Don’t need to assess everything – it is about experience, enjoying, sharing, learning “not performing”
* Very organised / printouts. Lessons ready to go
* Know when to watch & when to ask
* Put your own personal experiences into lesson when you can
* Building a cluster of teachers / high school students to assess & moderate the tasks / feedback on tasks.
* Lose control. (let the students drive it)
* Give the kids time to play with manipulatives
* Grab & go resources
* Sustainability clues to know where to go next
* Going through tasks thoroughly beforehand and make some predictions on what questions to ask throughout the task and even make some scaffolding point that may be needed
* Looking at tasks and fitting them into a context
  + Real world
  + Relevant STEM activities
  + Class topics
* Ensuring an entry level that is accessible to all
* Creating a safe classroom culture / environment
* Take time to thoroughly read through & prepare – demonstrate faith in the material (do not tweak at first)
* Let go of control (allow student voice, wait time, struggle, individual approaches)
* Low entry / high exit capacity – utilise this
* Classroom images – Collaboration, ‘fun’, engaging, active learning, textbook
* PLC’s – PL conversations
* Observations – intra school & stage of school
* Transforming practice using inquiry
* Increasing confidence on sharing a delivery of reSolve tasks
* Notice – observe – wonder. Responsiveness of staff open to trial
* Confidence to ‘trust’ the process and the outcomes
* ‘Relaxed’ assessment – prog
* Students feedback. Other than students saying we love maths or maths is their favourite subject
* Group of teachers training about resolve. Snapshot of PLC
* Asking students what they are doing. Lesson in operation – to support / show the protocols
* Teachers voice reflecting his/her teaching has been changed Honest – voice rather than scripted
* Transition program in terms of teaching reSolve. From primary to secondary
* Range of ages – levels shown while doing reSolve & feedback
* Views of students & teachers, now and in 18 months’ time
* Survey target group
* reSolve champions inspiring others to create inquiry classes using reSolve resources + other inquiry
* Pedagogical shift
* Before and after
* Excitement in teacher’s eyes (who is in audience?)
* Students are secondary school as well as primary
* Voices of students
* Getting live shots of the reSolve tasks in action
* Age appropriate pedagogy
* Maybe a visual data representation of the impact? Ie, students go from C to A or a graph increasing test scores
* ReSolve tasks being completed by students in class
* Feedback from students + Champion feedback and non-resolve - champion teachers (parents) before & after
* Champions delivering a task in PL with staff
* Sequence of learning – work samples
* More ‘dots’ on the map
* Shot of all champions in each state
* More confidence when teaching / talking about maths
* Video of kids ‘doing’ activities + sharing
* Comments from students – before / after
* Impact
  + Interview champions and teachers new to reSolve
  + Footage of students engaged and hearing their conversations
  + ReSolve being embedded across all year levels pp -6 (primary) & 7 – 12 (secondary)
  + Footage of champion delivering PL at school and network level (snippet)
  + Interview admin, focusing on ReSolve success stories and positive impacts
  + Education Department representation
* 18 Months’ time
  + Champion reflection journey – change in practice from teacher
  + Colleagues that worked in PLC’s
  + Resolve creates a new lens on pedagogy
  + ReSolve evolving the resources used in classrooms
  + Resolve being a part of professional discussion in school (show teachers talking around resources / work samples in meeting or PD time – naturally integrated
* Video 18 months’ time
  + Want to see cohesion
  + Highlight focus on proficiencies – 21st century skills
  + Change in secondary classroom
    - Structure
    - Student response
    - Concept over procedure
  + Magnitude of involvement in and use of reSolve
  + Students (affective) progression – Look at impact of reSolve – style in senior secondary subject choices over next 18 months – eg compare current year 9 choices if using reSolve approach
  + Pre / post teacher interviews – Use reluctant & interested teachers
* Impact
  + Staff ‘buy in’
  + Student engagement
  + Integration
  + Collaboration – everyone takes away something new
  + Love of maths – reflected visually around the school
  + Problem solving – process over content
  + Honouring tasks with time and teachers not feeling guilty
* High ceiling – low floor
* Teacher intervention
  + Changing / extension concepts
  + Promote risk taking
  + Teacher intervention, limited but purposeful
  + Encourage shared explanation
  + Teacher clarification
  + Set up inquiry
* Principles
  + Set up the inquiry
  + Explanation / clarification of misconception, without answer
  + Teacher dependency – push to exploration / ext
* Teachers obs
  + Move to the independ.
    - Making the decision to ‘stop’ helping or cutting back
  + Clarification of misconceptions
  + Set the scene, understanding initial
* Students obs
  + Dependency on the teacher
  + Verbally clarification
  + Collab – independ
* A shift on the way my colleagues teach mathematics
* Examples of ‘workshop’ model rather than ‘one size fits all t-shirt- model
* reSolse lessons in action
* Students thinking & speaking showcase the students – what makes you say that?
* Interview / engagement data. Attitude
* Parent workshop – run by the kids about the way they’re learning maths
* Teachers going beyond the reSolve resources – Inquiry
  + Eg, Josh’s carpark pricing problem solving photo (see Josh)
* Video wish
* Impact from teachers that have been influenced by champions
* Feedback on before and after. Students / parents / teachers etc…
* Impact of champions
* See kids engaged as end result
* Hear someone (a teacher) say ‘it was worth the time’, ‘we have seen results’
* Validation
* Parents feedback
* Student feedback
* Students hands-on working together
* More of Denise smiling
* A teacher whose changed their own mindset
* How has enquiry changed students attitude to maths & their own learning
* More than one school more than one group
* Comment from students re: change of success, empowerment, self-efficiency
* Children talking about maths on the video
* Video more footage of students thinking mathematically
* More spots on map of Australia.
* Inspire + engage more people
* Teachers paying more attention – paid to children’s perspective
* Teachers reflection on approaches taken in classroom
* Connections between reSolve and other learning (subject)
* Make the changes in classroom culture (students & teachers) explicit
* Students voices expressing change of attitudes – older students
* Not department voiceover; perhaps a student voice to reflect the student centred – everyday languages
* Teachers changed attitudes
* Images of website, links
* Authority figure eg. DoE minister
* No Slow pans
* More hands-one and engaging lessons, eg bottle flipping
* What would we like to see in a video in 18 months’ time
  + High school students voice – Eg like the panel eddy was story from student
  + Someone from government ed Dept of Education (fed & state) – saying that they acknowledge and support it – They believe in it – the benefits they see
  + Parent Voice
  + Parent education
  + Principal voice eg inspiration voice in their school
  + What is maths about (that questionnaire) parent / teacher / student
  + Memes
  + What does maths mean etc
  + Survey results
  + Student slice across different years eg Year 1 to year 12 eg now and in 12 months
  + Students video showing students doing practical activities
  + Their feelings about maths before and after
* Changing teaching practices
* Student voice
* Before/ after snapshots from colleagues of champions
* Evidence of systemic change
* Community of school networks
* To demonstrate an overall impact / success refute potential argument of success due to teacher, school setting, student behaviour etc
* Compare survey responses
* Data from student perspective
* Data from parent perspective
* Date from new teacher perspective
* Before and after impact on:
  + Teacher – pedagogy, mindset implementation of resources, developing own resources (re: reSolve protocol – long term / sustainable), differentiation – Impact of Fun / interesting lessons of student behaviour + classroom management
  + Students – attitude to maths, engagement, thinking, challenged at their level of understanding, sustained retention of concepts
  + Parents – promoting a learning community, wanting to know more, change in their expectation of school maths
* Soundbites / vox pops \*emphasis on application across ALL school settings. (selective up and down SE status / rural, Steiner, catholic, Christian, primary, high school, metro / city)
* Capture whole school approach. PLT in action
* Evidence of the protocols – demonstrate how they’re purposeful
* Voice of students now, compared to 18 months – perception + disposition
* Voice of teachers – how they felt at the start, compared to after using resources for a while
* Teachers excited to talk about maths
* Variety of ages of teachers represented
* Students thinking about their own thinking
* Interview parents – change in children’s perception and engagement, making connections to maths
* Before and after statements from colleagues
* Statement from colleagues about the understanding of a quality maths task (ability to transfer this to tasks external to reSolve)
* Excitement from colleagues about maths
* Longevity (is embedded)
* Statement from Colleagues about effect on students
* Ease of Picking up a task and building personal knowledge
* Colleagues confident in ability to deliver & diagnose / assess students learning by inquiry
* Who is good at maths? ……”ME” (please see photo)
* Kids perspective
* Student conduct the interview
* What impact this has been on me (student)
* Aspiring students may have to become ‘great educators’ themselves
* Kids interviewing their teacher, a champion
* Show their classroom experience
* Feature teachers from the school “champions have touched”
* Parents + kids
* This continues to be a fantastic program – I’m going to stay onboard
* Principal interview
* Quality of being taught positive impact
* Visual + active – robots. Bakery – recognisable reSolve tasks
* Colleagues in rooms facilitating these tasks. Kids smiling + actively engaged
* Student learning, engagement, understanding, success and appreciation of mathematics – a trickle down result from the champions
* Student voice – reflecting the above
* Parent + colleague voices reflecting the above
* Impact on colleagues
  + They have their own wings and are flying
  + Classrooms look different, lots of resources around, student work on display
  + Classrooms with a lot more conversation and movement happening – less teacher task and more student conversation
* Colleagues
  + Are thinking from a conceptual basis, not contact basis
  + Connecting with other subject area maybe
  + More ‘paddocks’
  + More willing to take risks
  + Higher level of professional conversation / discussion / critical reflection / classroom visits / mentioning & coaching
* Reflection from a student that has been involved
* Reflection from a teacher (not a champion) on how it has changed / impact their teaching
* Teachers collaboration
* How reSolve has been used in a PLC – impact beyond ‘just resolve activities’
* Showing students making generalisations / working as mathematicians
* More than 1 video – different audiences
* Student voice
  + Kids talking about their learning – connections
  + Enhanced students engagement in mathematical thinking
  + Working samples
* Teacher
  + Confidence in self inspired , self efficiency
  + Able to appy their learning f…??? across units
  + Easy
  + Explicit
  + Supports planning
* Leadership
  + Protocols + pedagogical shift T + S
  + Engaged happy, community / engaged in maths
* Parents / community – happy understand
* Students sharing common experiences
* Students engaging with reSolve
* Insight into teacher’s perspective
* Showcasing opportunities
* Shift in attitudes?
* More evidence of the proficiencies coming to life in the students in their ‘own’ voice
* Our students see themselves as mathematicians
* Proof
  + Student engagement improvement + student growth improvement
* Surveys
* Data
* Focus on what students are doing in classrooms
* A student-centred response on how resolve has improved their experience of maths
* A team / group of teachers change in thinking (culture) and work as a PLC using modules and tasks
* Principals describing shift in whole school approach to teaching / learning of Maths – We focus less on this… more on this… (balance)
* Make details in video congruent with Protocol eg Pi multiple tables?
* Reference to open tasks and inquiry process
* Teachers ditching worksheets
* Multiple paths to answers
* Authentic samples not staged
* Group of teachers talking about what they see – children’s work samples
* Student voice
* Children explaining their thinking (concepts)
* Protocols demonstrated through
* Student engaging in task
  + Using manipulatives
  + Listening to each other explain / pose Q’s – saying ‘what if’?’
* Students giving explanations of their thinking to class
* Planning meeting
  + Preparing for a task
  + Reflecting on task
  + Where to?
* Staff meeting with teacher engaging with reSolve resources
  + Doing tasks
  + Analysing
  + Reflecting
* Student voice
  + Engagement
  + Challenge
* Data
  + Quantitative
  + Qualitative
* Change of prac / pedagogy
* Teachers – team – Schools
* Style of learning
* Teachers voice
* Classroom – hands on.
* Student to student
* Many more examples of school activities, teacher, nature of activities and vision & student engagement – snippets
* Comments from individual students
* Comments from principal about the shift
* Comments from parents about the shift
* Some connection between what we’ve seen and larger international scene