

# MAXIMISING LEARNING OUTCOMES – SPA CONFERENCE 2017

SPEAKERS: PAM THUAN AND JOHN CULLEY

Mahogany Rise Primary School



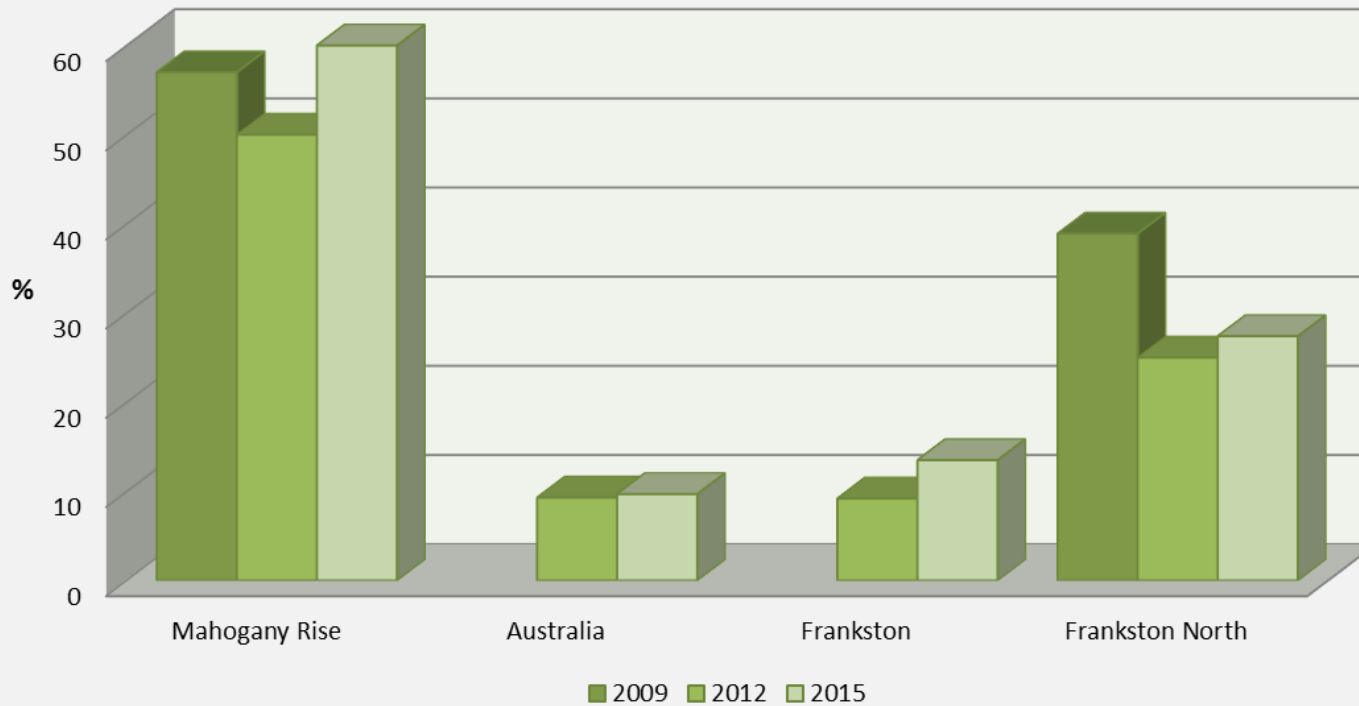
# AEDC MAHOOGANY RISE P.S.

Comparative Data 2009, 2012, 2015

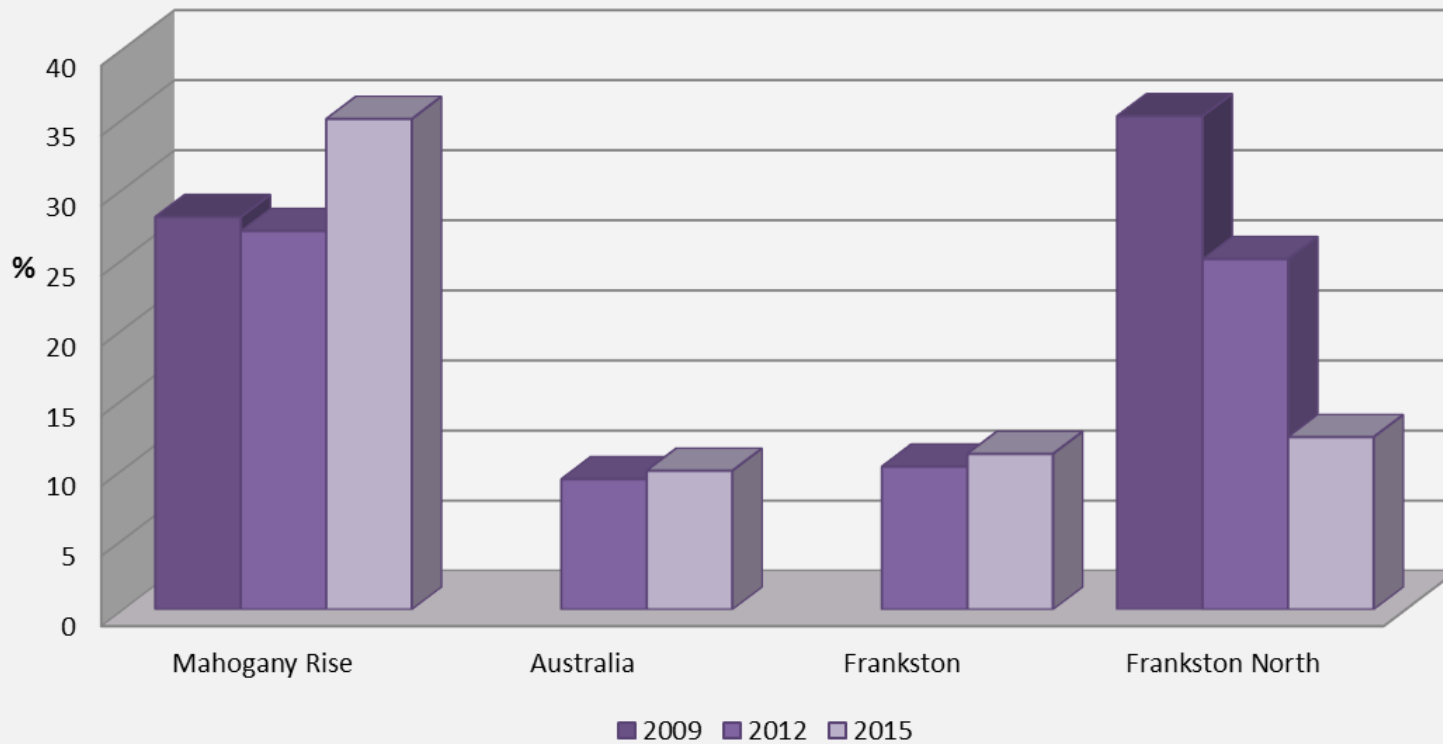




## Domain 1: Physical Health and Wellbeing

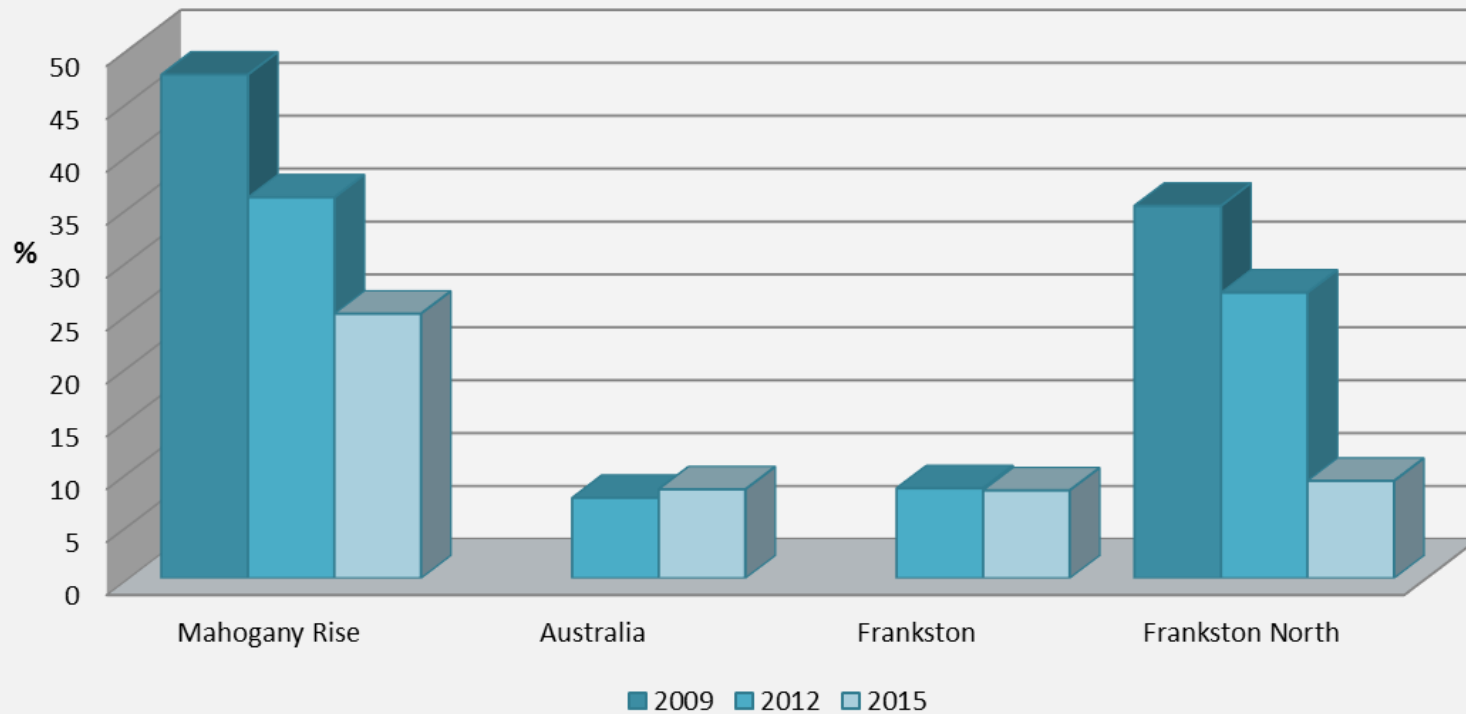


## Domain 2: Social Competence



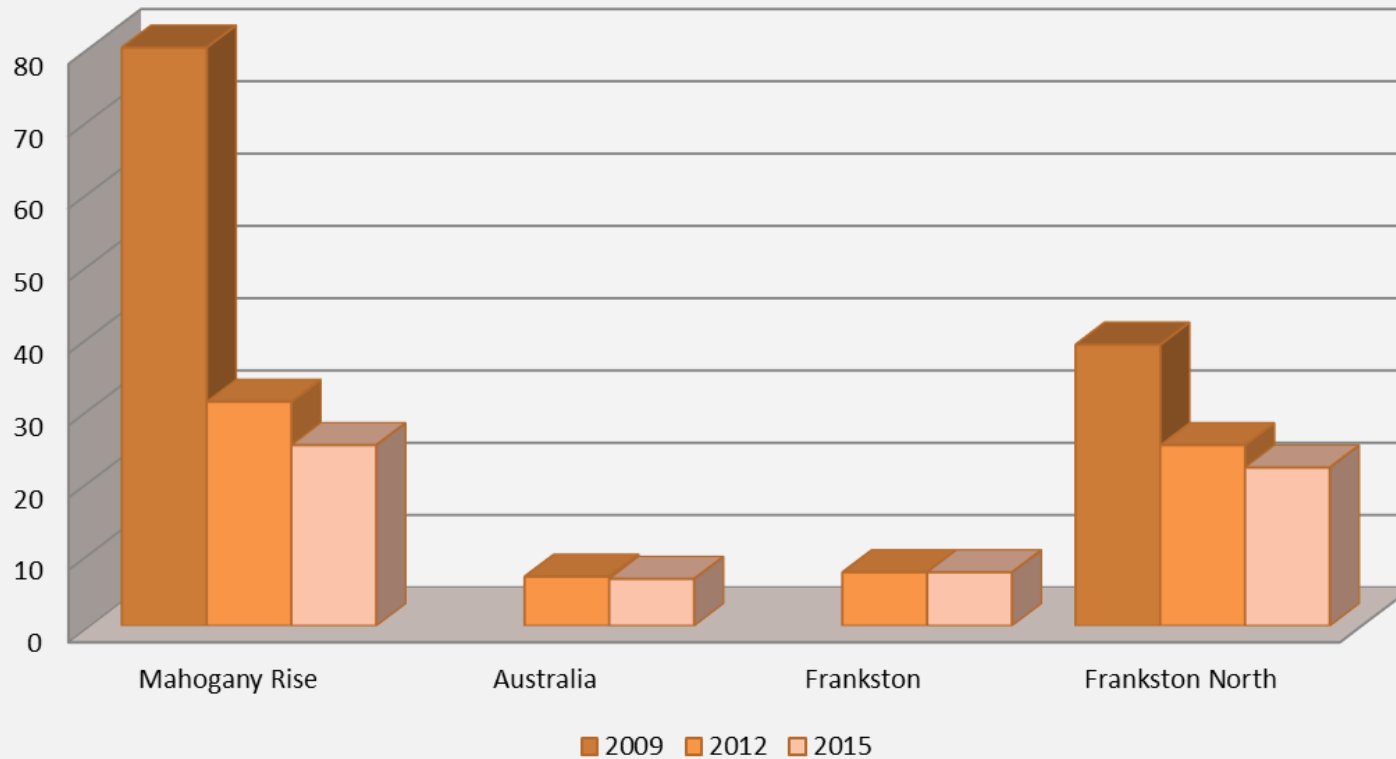


### Domain 3: Emotional Maturity



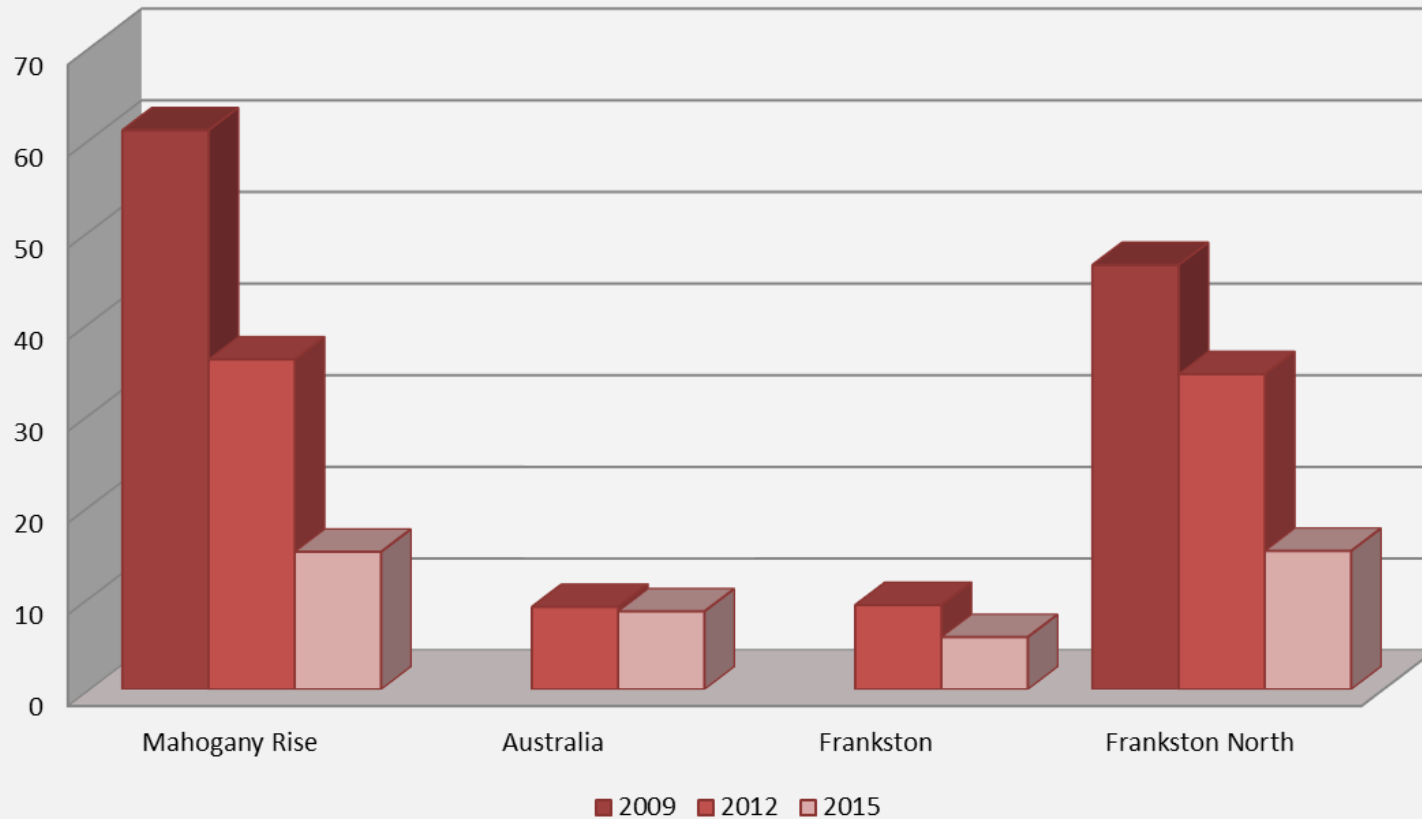


## Domain 4: Language and Cognitive skills



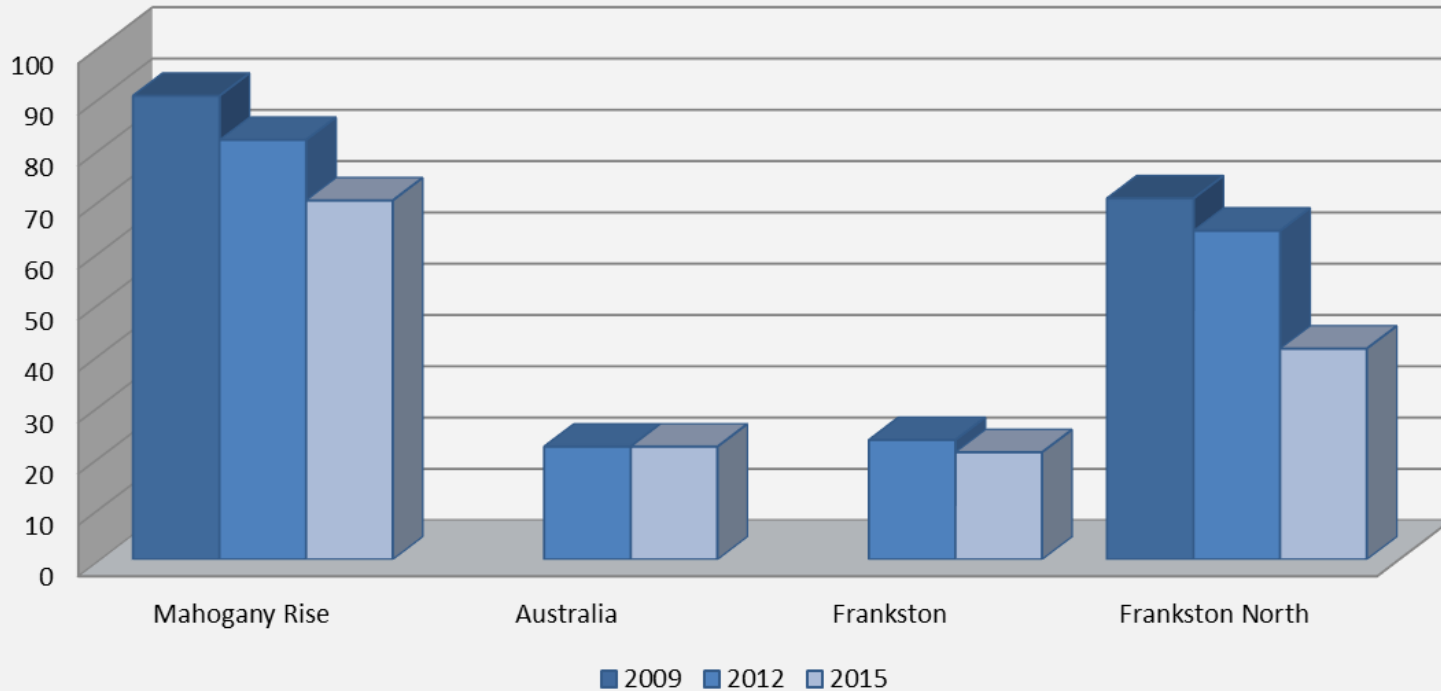


## Domain 5: Communication skills and General Knowledge



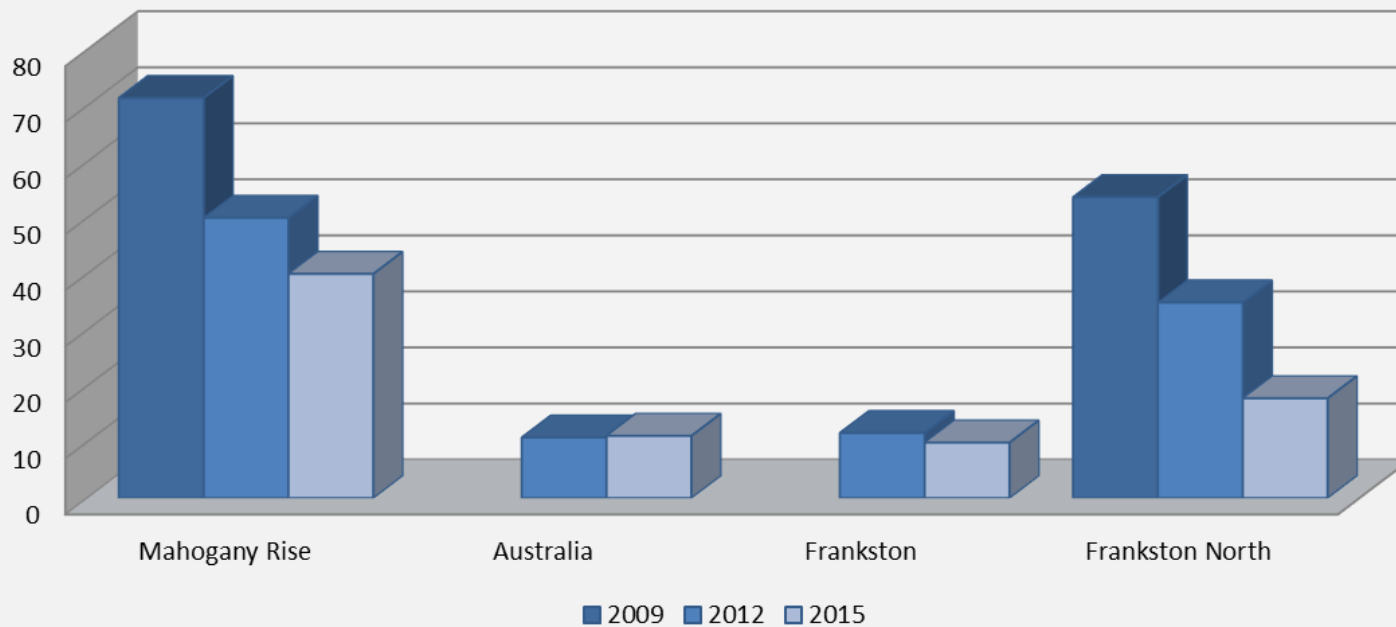


## % of Students Deemed Vulnerable in 1 or More Domains





## % of Students Deemed Vulnerable on Two or More Domains

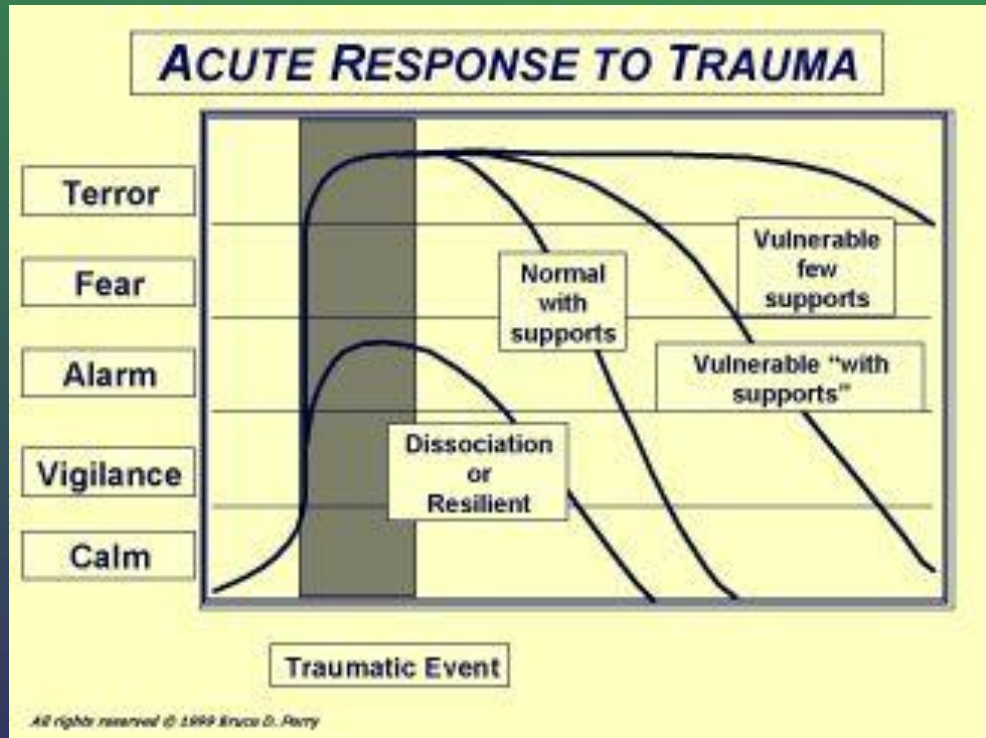


# STAFF PROFESSIONAL DEVELOPMENT

- ▶ Trauma
  - ▶ Brain development
  - ▶ Response to trauma
  - ▶ Effects
- ▶ Poverty
- ▶ Mental health
- ▶ ASD, ADHD, ODD



# RESPONSE TO TRAUMA



- Students exposed to trauma are more easily terrified
- As their level of vulnerability increases and their level of support decreases the more likely they are to be in a **constant state of 'fight or flight'**
- If trauma persists, fear state persists therefore we must understand the fear response.

Once students are experiencing fear/terror;

- their cortex shuts down
- they **cannot think logically**
- they watch your face for expressions rather than listen to what you are saying
- very sensitive to body language

# TRAUMA AND BRAIN DEVELOPMENT

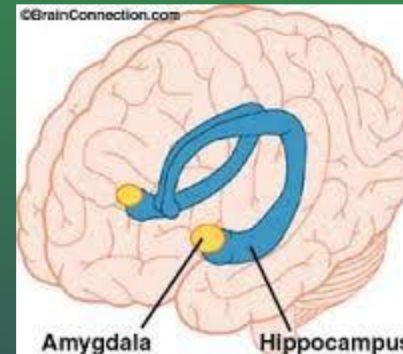
Two main areas of the brain are affected by trauma:

## Amygdala

- fast circuit – rapid, unconscious, automatic, reflexive responses
- involved in assessment of threat-related stimuli
- necessary to initiate 'fight or flight'
- hyper-responsive after trauma

»The amygdala is the smoke detector of threat

»It is Responsible for the 'fight or flight' response

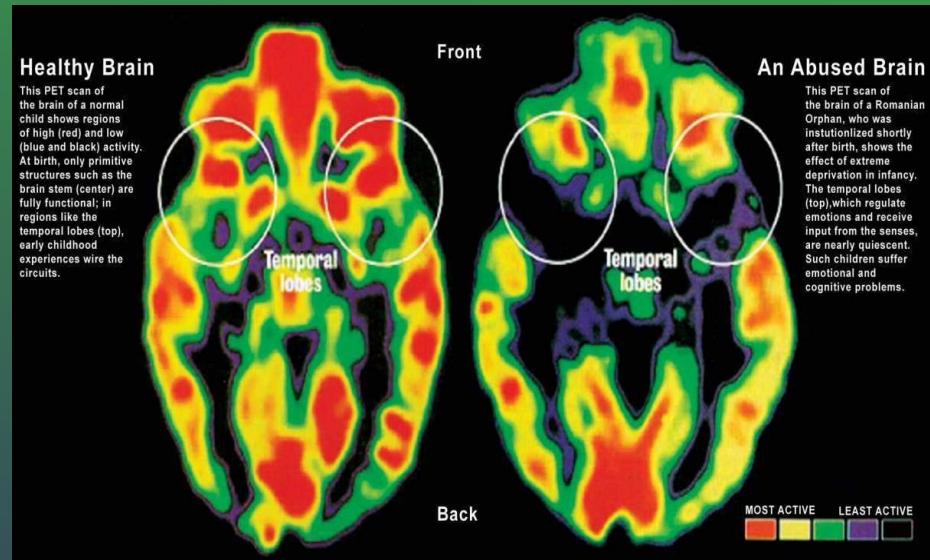


## Hippocampus

- slow circuit - slower acting
- brings logic and thinking to responses
- involved in accessing memories
- provides a context for the 'fight or flight' process
- hippocampal volumes are decreased after trauma

# EFFECTS OF TRAUMA

- »Developmental delays
- »Odd eating behaviours
- »Soothing behaviours are self harming
- »Role model after abusive parent
- »Aggression and cruelty
- »Inability to see consequences for behaviours
- »Impaired ability to trust
- »Hyperactive or hypervigilant
- »Dissociates when threatened – seen as lying
- »Memory disturbance of abuse – seek out trauma experiences
- »Controlling as no self control
- »Unsafe behaviours – trying to match outer world to inner turmoil
- »Some children engage in inappropriate sexual behaviours... usually 2 reasons 1. history of sexual abuse (boundary confusion) 2. Neglect



Normal brain vs brain of a child who has suffered severe neglect

# STAFF ARE TRAINED TO:

- ▶ Provide predictability:
  - ▶ Rigour and routine
  - ▶ Whole school behavior plan linked to values
  - ▶ Visual flow timetables and flow charts in all classes
  - ▶ Set structure for sessions – mini-lesson (explicit teaching), group or individual work, sharing/reflection time
- ▶ Teach self regulation
  - ▶ Calming strategies
  - ▶ Explicit teaching about the brain
  - ▶ Meditation
- ▶ Build relationships
  - ▶ Emphasis on the importance of developing bonds with students (and parents)
  - ▶ Provision of mentors and role models
- ▶ Provide individualized programs for learning (oral language program)
  - ▶ Focus on metacognition
  - ▶ Instructional model with explicit teaching
  - ▶ Individualised learning with scope and sequence for goals



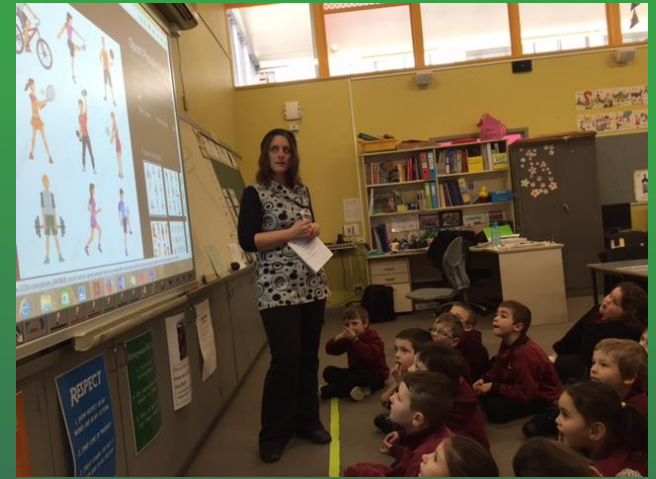


# WHY AN ORAL LANGUAGE PROGRAM?

- ▶ Low levels of language for students entering the school
- ▶ 90-95% of students score below the 25<sup>th</sup> percentile in one or more areas of language during initial testing
- ▶ Exposure to trauma risk increases the likelihood of low language levels – trauma exposure can impair development required for language
- ▶ Decreased exposure to vocabulary and language in low SES demographic
- ▶ Effective communication is required for academic learning and development of social interaction
- ▶ Academic learning and social interaction vital for success and self esteem
- ▶ Language skills required for disclosure and safety
- ▶ Explicit and thorough teaching of language skills required to “close the gap”
- ▶ Reduce negative social impact, increase positive social impact (less -jail, domestic violence, reliance on substance abuse; more employment, engagement, positive relationships)

# STAGES OF THE PROGRAM

- ▶ Began with prep students in 2008
- ▶ Comparison with control school in 2010 demonstrated significant improvement of treatment group compared to the control
- ▶ Became a whole school program in 2012 after it was discovered through normed assessment that student's language results plateaued after leaving the program
- ▶ Is now integrated into the curriculum and planning at all levels
- ▶ Adaptively managed
- ▶ Plan to work with Melbourne University to assess Secondary students to ascertain language trajectory after the program





# LANGUAGE PROGRAM STRUCTURE



## Assessment:

- ▶ All students assessed and tracked using the following:
  - ▶ CELF4 – UP, CFD, FS
  - ▶ ERRNI – narrative information
  - ▶ SPAT – PA
- ▶ Assessed at least once a year
- ▶ Use speech pathology students and trained aides to assist with assessments
- ▶ Data is analysed and used for planning for whole school, classes and individual students

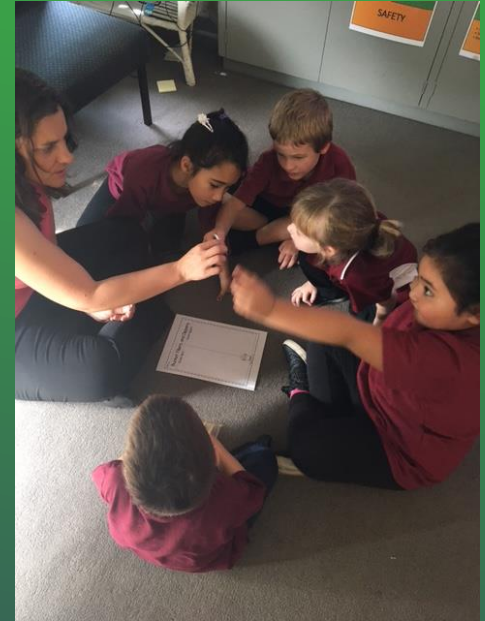
# PLANNING

- ▶ Evaluated as part of the whole school review every 4 years
- ▶ Yearly goals and strategies written into the AIP
- ▶ Speech pathologists, teachers and the literacy coordinator plan each term to:
  - ▶ target language goals in oral language sessions
  - ▶ integrate oral language goals into literacy and wellbeing plans
- ▶ Term plans are:
  - ▶ based on data and needs of students
  - ▶ evaluated weekly through observation of student achievement and needs
- ▶ Scope and sequence for all areas of language that link to the Victorian Curriculum are provided to use for planning and evaluating student progress ([www.languageintheclass.com](http://www.languageintheclass.com))
- ▶ Resources provided by speech pathologist ([www.languageintheclass.com](http://www.languageintheclass.com))

# THE PROGRAM


## Phonemic awareness and phonics

- ▶ Lots of teacher training in response to Westerveld and Barton study (most teachers struggled to identify digraph vs blend)
- ▶ Synthetic phonics program for prep – Jolly phonics (some cued artic integrated into actions)
- ▶ 10 min daily ‘word chat’ for all classes includes – syllabification, segmenting, blending, air-writing (visualisation of letters/syllables/words), meaning, word families, manipulation
- ▶ Half hour session with speech pathologist each week in all classes with a spelling focus (eg. c/k/ck)
- ▶ Students below the 25<sup>th</sup> percentile provided with intervention in small groups or individual speech therapy session



# THE PROGRAM

## Receptive language

- ▶ High focus on metacognition – thinking about thinking and how we comprehend and learn
  - ▶ Explicit teaching of language concepts and vocabulary
  - ▶ Explicit teaching of auditory memory strategies including picking out key words, visualisation, making connections
  - ▶ Exploration of schema and different perspectives
  - ▶ Conversation breakdown and repair
  - ▶ Exploration of character feelings and intentions (in narratives)
  - ▶ Explicit teaching and practice of inferring
  - ▶ Exploration of how new information can alter meaning
  - ▶ Linked to language songs in junior school
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- A series of white diagonal lines of varying lengths and thicknesses, located in the bottom right corner of the slide, creating a modern, abstract graphic element.

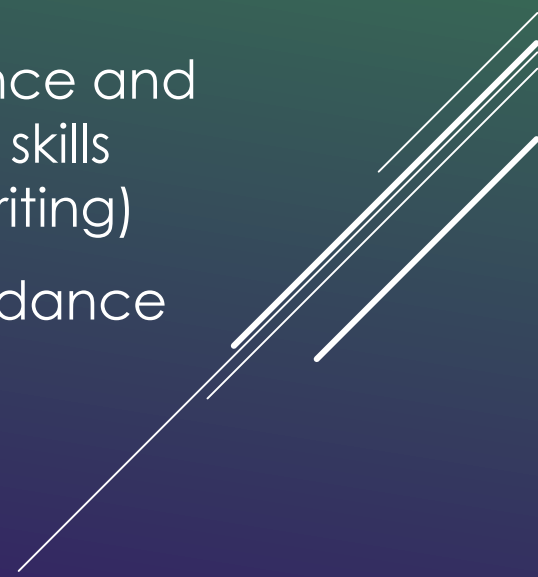
# THE PROGRAM

## Expressive language

- ▶ Explicit teaching of:
  - ▶ grammatical structure
  - ▶ narrative structure
  - ▶ vocabulary for expressing emotions, opinions and negotiation
- ▶ Lots of talking time – practice making sentences. Say it before you write it.
- ▶ High focus on the use of connectives and expanding vocabulary
- ▶ Grammar used in oral language linked to text type (e.g. Tense)
- ▶ Supported by VCOP in writing
- ▶ pragmatic language linked with wellbeing program
- ▶ Oral language focus in excursion/incursions – encouraging discussion both during and in retell
- ▶ Linked to language songs in junior school



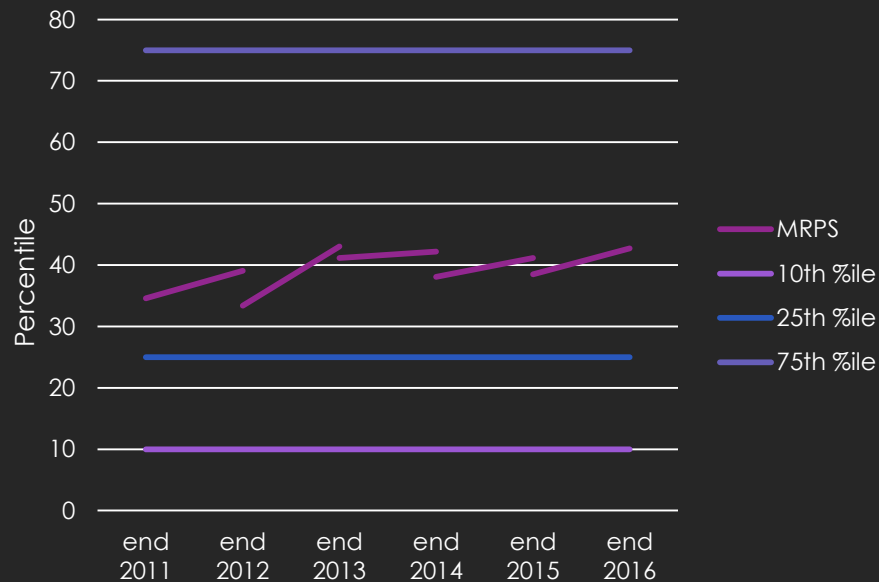
# FINDINGS

- ▶ High improvement in 4 areas of language for both students exposed to trauma and those not exposed to trauma
  - ▶ Less improvement in concepts and following directions than in other areas (except for classes that used high metacognition focus and explicitly teach conversational repair)
  - ▶ Students exposed to drug use, domestic violence and neglect showed lower transference to literacy skills (benchmarking, VELs, NAPLAN reading and writing)
  - ▶ Students who experienced lower school attendance had slower growth
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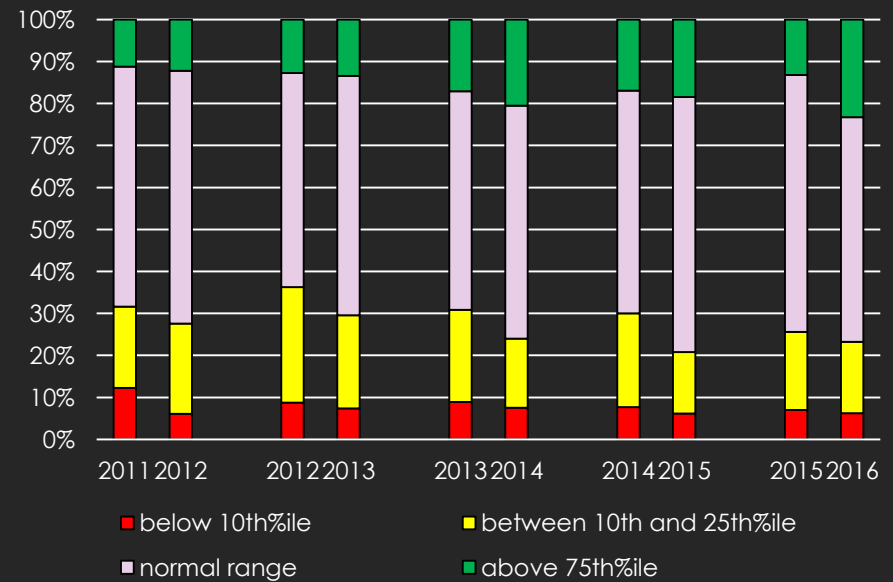
# WHOLE SCHOOL GROWTH – 5 YEARS

## RECEPTIVE LANGUAGE

### Concepts and following directions



### Concepts and following directions

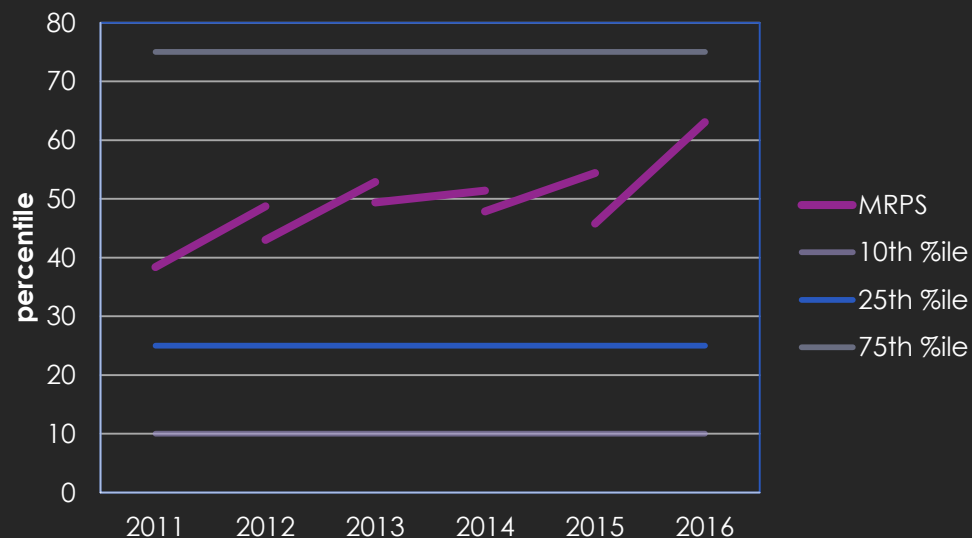




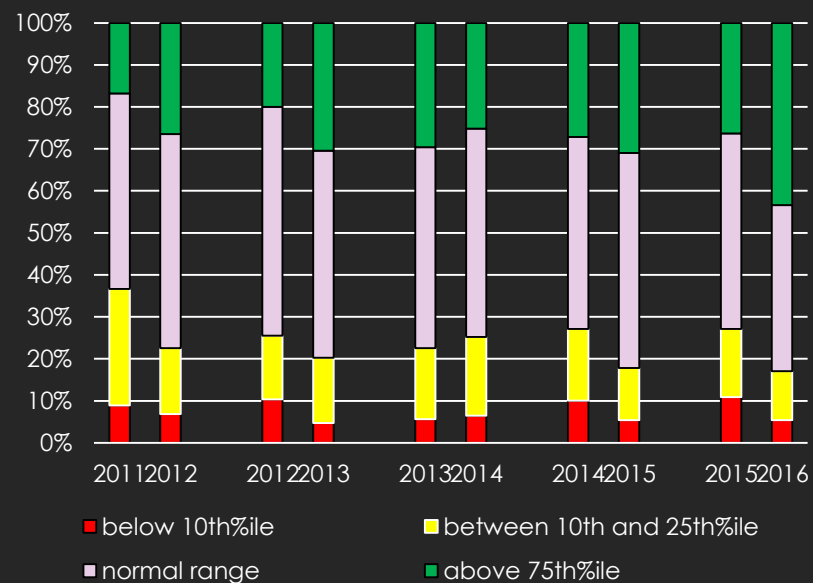
# Whole School Growth – 5 years

Receptive language

## Growth for whole school understanding paragraphs



## Understanding paragraphs

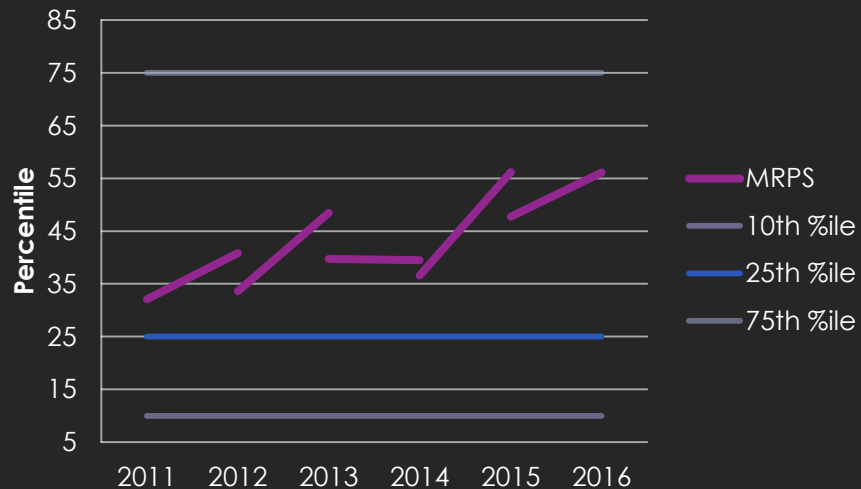




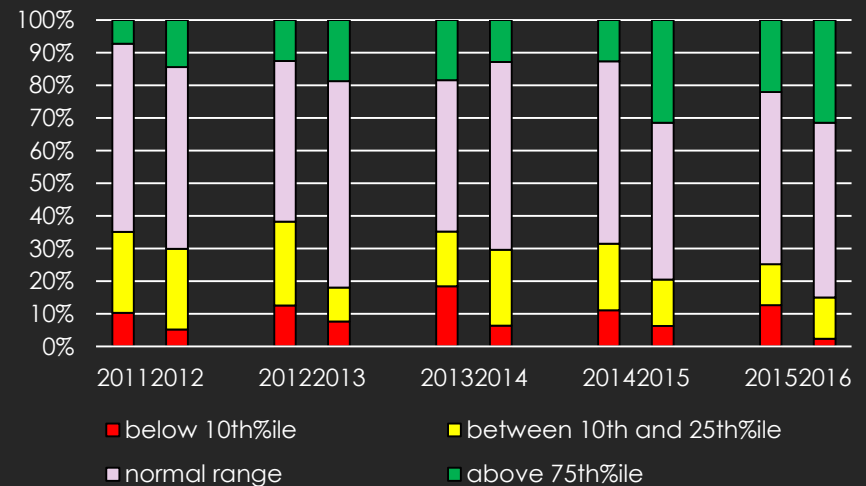
# WHOLE SCHOOL GROWTH – 5 YEARS

## EXPRESSIVE LANGUAGE

### 5 year growth narrative production



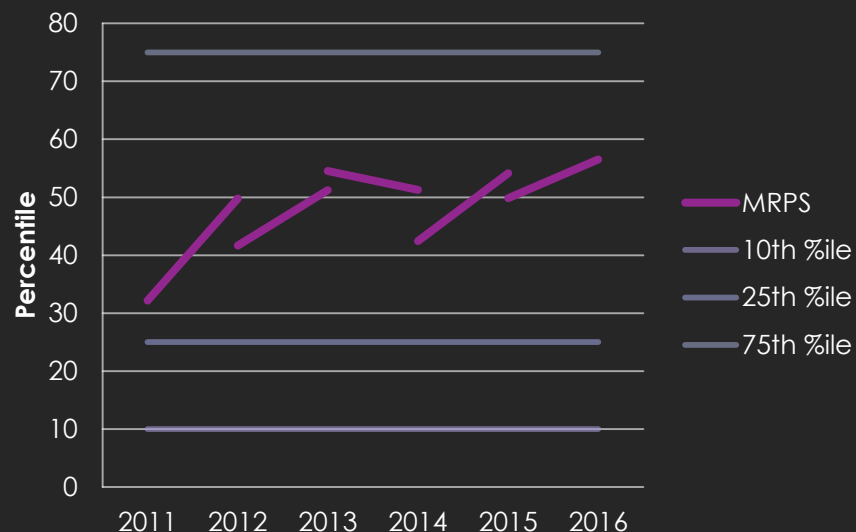
### Narrative



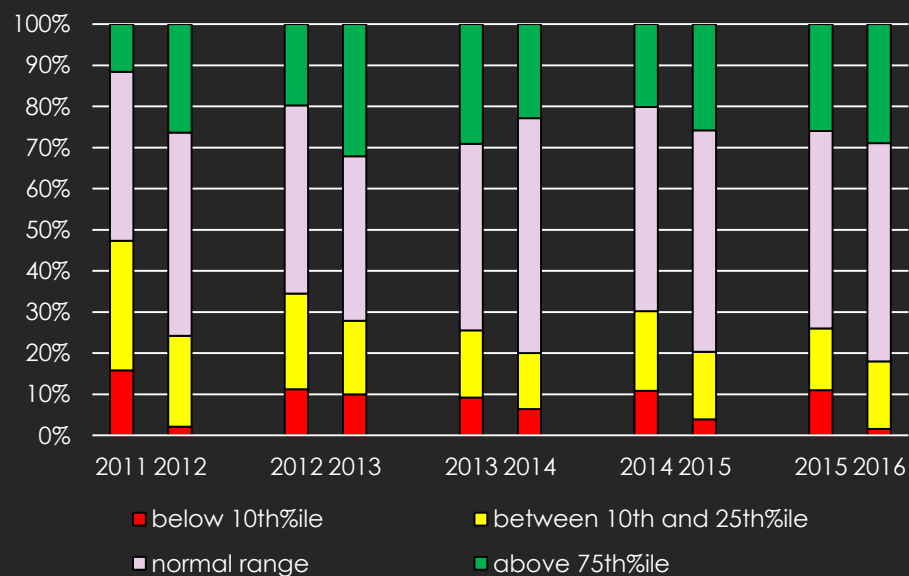
# WHOLE SCHOOL GROWTH – 5 YEARS

## EXPRESSIVE LANGUAGE

5 year growth formulating sentences (grammar)



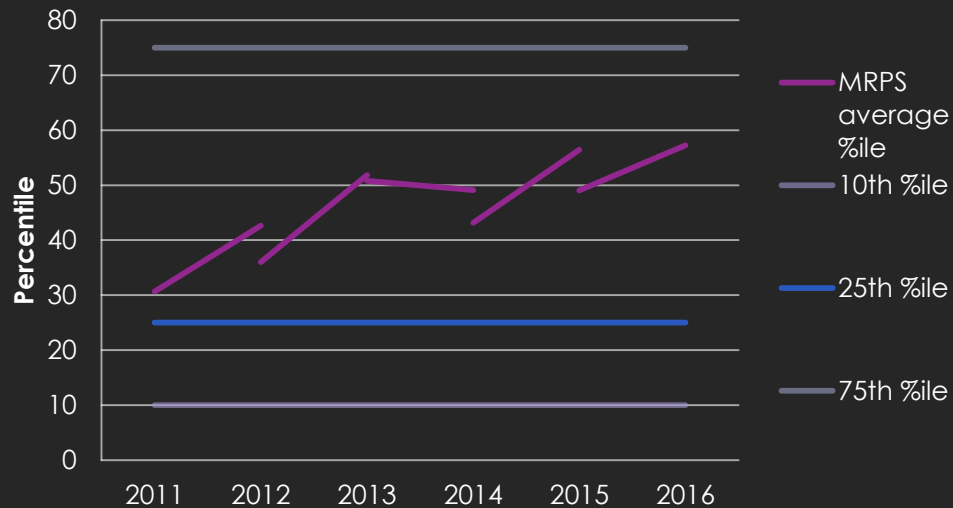
Formulating sentences



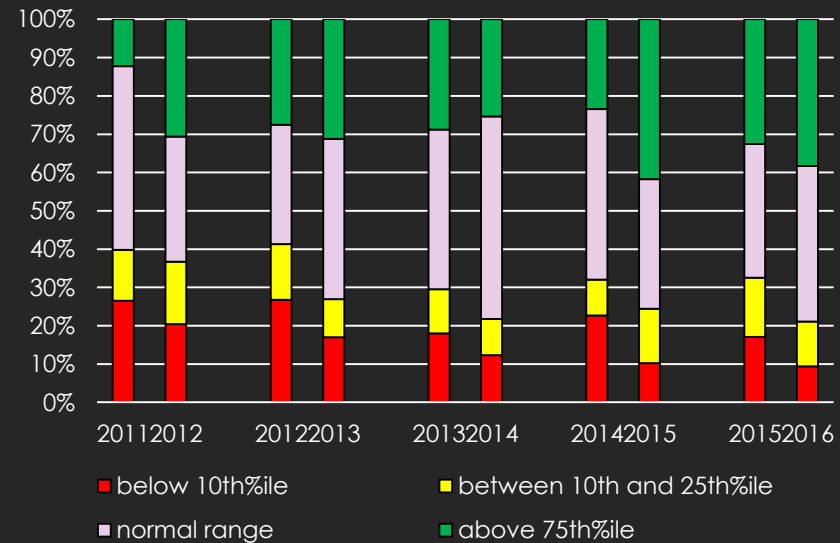
# WHOLE SCHOOL GROWTH – 5 YEARS

## PHONEMIC AWARENESS

### 5 year growth phonemic awareness



### Phonemic Awareness



# NAPLAN

## Mahogany Rise Primary School, Frankston North, VIC

The National Assessment Program – Literacy and Numeracy (NAPLAN) assesses all students in Australian schools in Years 3, 5, 7 and 9. For more information visit the [NAPLAN website](#).

The chart below displays average NAPLAN scores for each [domain](#). The selected school's scores are displayed in blue. Also displayed are average scores for statistically similar schools (SIM) and all Australian schools (ALL). The coloured bars indicate whether the selected school's scores are above, close to, or below the other scores.

2008	2009	2010	2011	2012	2013	2014	2015	2016		
Colour Scheme <div>Red &amp; Green</div> <div>Submit</div> <div>Alternate view: <a href="#">Results in graphs</a></div>										
	Reading		Writing		Spelling		Grammar and Punctuation		Numeracy	
Year 3	392 359 - 425		395 369 - 422		417 387 - 447		411 377 - 446		395 368 - 422	
	SIM 380 371 - 389	ALL 426	SIM 392 384 - 400	ALL 421	SIM 382 373 - 390	ALL 420	SIM 393 383 - 403	ALL 436	SIM 360 352 - 369	ALL 402
	506 473 - 540		486 453 - 519		543 512 - 574		491 454 - 527		471 443 - 498	
Year 5	506 473 - 540		486 453 - 519		543 512 - 574		491 454 - 527		471 443 - 498	
	SIM 460 451 - 468	ALL 502	SIM 446 438 - 454	ALL 476	SIM 462 454 - 470	ALL 493	SIM 468 458 - 477	ALL 505	SIM 455 447 - 463	ALL 493

# HOW CAN THIS BE OF USE TO YOU?



Support beyond our school

- ▶ Scope and sequence with resources on [www.languageintheclass.com](http://www.languageintheclass.com)
- ▶ Link on website to language songs (or ask us about CD)
- ▶ Whole class language interest group meets once a term (details available at [www.languageintheclass.com](http://www.languageintheclass.com))
- ▶ The Learning Brain on YouTube
- ▶ How full is your bucket YouTube

Questions and comments:

[thuan.pamela.j@edumail.vic.gov.au](mailto:thuan.pamela.j@edumail.vic.gov.au)

# WHAT ELSE WE (MRPS) NOW PROVIDE

At our school and beyond:

- ▶ Pediatrician
- ▶ Registrar
- ▶ OT
- ▶ Wellbeing officer – links to outside services
- ▶ Lawyer
- ▶ Psychologists
- ▶ Social worker
- ▶ Breakfast and lunch with full kitchen facilities
- ▶ Links to secondary college
- ▶ After school programs (dance, bike repair, sports etc.)
- ▶ Volunteers through ardoch (eg. science and math programs)
- ▶ Parent engagement officer
- ▶ HADIL (Holistic Approach for Developing Individual Learner) – includes self regulation, self esteem, physical/mental/emotional wellbeing
- ▶ Overseas experiences Work with Frankston North kinders/childcare
- ▶ Oral language program for all of Frankston kinder/foundation including parent information
- ▶ Future plans for Frankston North hub

