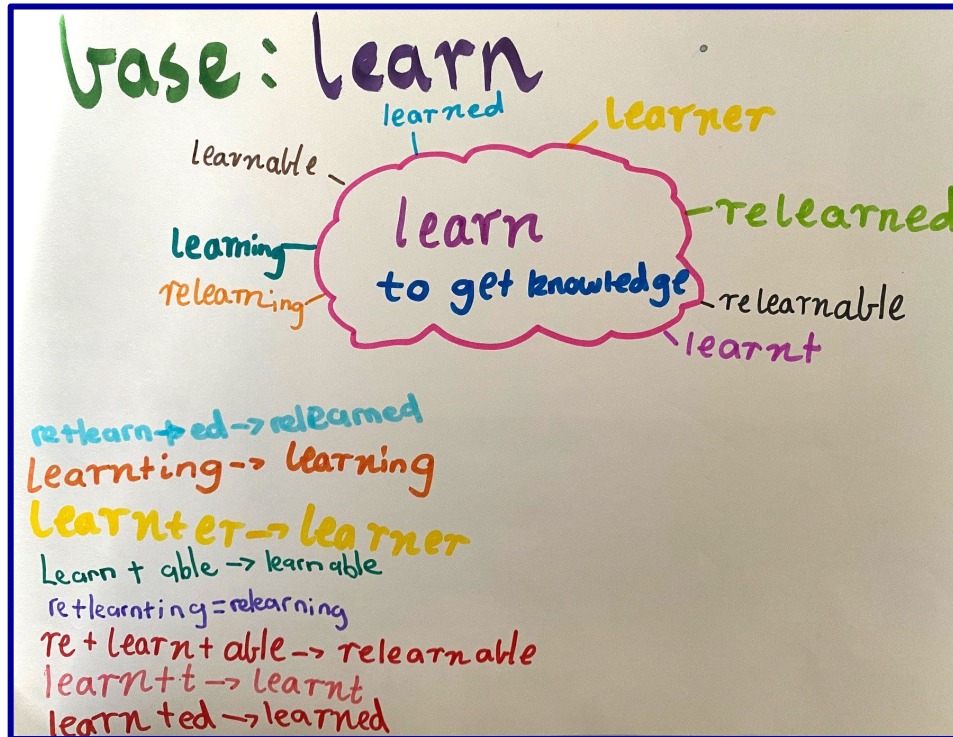


BALWYN NORTH
Primary School

Balwyn North Primary School Orthography Story



Balwyn North Primary School Context

At Balwyn North Primary School, we strive to provide a nurturing and challenging environment that empowers students to reach their personal best, both academically and socially. We have a diverse and inclusive school community, with an enrolment of approximately 560 students, with many families from a wide range of cultural backgrounds. We have an SFOE index of 0.1516 and 51% percent of our students identify as having a LBOTE. Due to our diverse community, the school employs a multilingual Multicultural Aide, and an EAL teacher. In 2017, Balwyn North Primary School achieved authorisation as an IB World school and we now implement the International Baccalaureate (IB) Primary Years' Program (PYP). The PYP focuses on the total growth of the developing child, touching hearts as well as minds and encompassing social, physical, emotional and cultural needs in addition to academic development. We have a student centred philosophy to teaching and learning, where student driven inquiries go hand-in-hand with explicit focused teaching, to offer learning experiences that are truly meaningful to each child. Students are encouraged to have agency in their learning and pursue new knowledge and understandings that are personally relevant to them.

In 2017, as part of the School Strategic Review, analysis of NAPLAN, teacher judgment, and Student, Staff and Parent survey data revealed that while our students were achieving at high levels in literacy and numeracy, their sense of challenge, agency and engagement with learning, was an important area for potential growth. We designed the goal of building a rich, challenging and stimulating learning program that meets all students at their point of need. Through this staged work, the school set about developing a series of whole school approaches in Mathematics, Writing, Reading and Spelling. These were consultative processes, where the development of a shared philosophy, language, pedagogy, resourcing and the building of teacher capabilities went hand in hand.



About Structured Word Inquiry

What is Orthography?

Orthography is the study of our writing system as demonstrated by the analysis of the word:

English spelling has three interrelated aspects: morphology, etymology and phonology (orthographic phonology) and always prioritises meaning.

Structured Word Inquiry (developed by Dr Peter Bowers) enables learners, of all ages, to investigate and discover a whole range of wonders about our spelling system. Students question, hypothesise, investigate and draw conclusions or understandings about how spelling actually works. Through the use of linguistic tools, such as word webs, word sums and matrices, learners can explore our rich language.

In the past, spelling programs have relied on the rote learning of words and correctness, however, the focus is now on understanding. Teachers can help students learn about conventions of spelling, historical connections, stories about words; and accurate and explicit knowledge about grapheme - phoneme correspondences.

The study of orthography is both exciting and challenging; and taps into a learner's curiosity. Many students develop a passion for finding out more about the English writing system.

Orthography →

orth +

(Gk: correct,
straight, true)

| o + graph

(Gk: written
symbols)

+ y

(suffix: can be nour
forming)

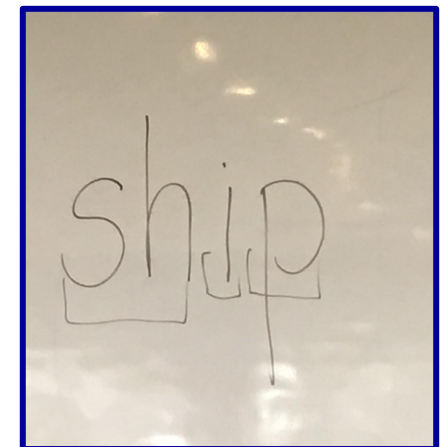
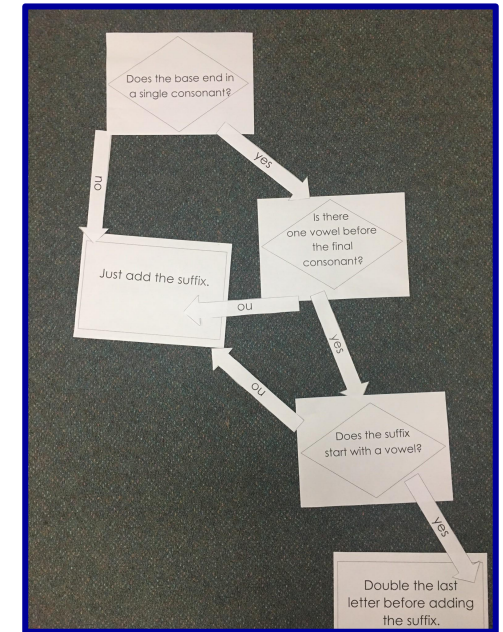
Teacher Professional Learning

Our Orthographic Journey

Our Orthography journey began in 2018, with a whole day of professional learning about Structured Word Inquiry with literacy consultant, Julie Shepherd. This new learning was truly exhilarating, as we explored a new way to examine English spelling that relied on an understanding of the structural and historical underpinnings of English. We learnt that English spelling is informed by morphological (word structure), etymological (word origin/history) and phonological (sound-symbol representation) features.

Through explorations, we discovered that *construct*, *deconstruct*, *instruct* & *obstruct*, all belong to the same word family, with the base <struct>, which means to build, assemble or arrange. It was fascinating to learn that the <wr> phoneme, has a Germanic history and links words that imply twisting or distortion. (Think *wring*, *wrap*, *wrangle*, *write*, *wreck*, *wretch*, *wrought*). We explored the conventions that guide the joining of morphemes, considering how doubling of the final consonant of a word is dependent on the number of syllables in the base or the suffix you are adding. (Think about how suffixes work in the words *skipping*, *skipped*, *skips* or *rotating*, *rotated*, *rotates*.)

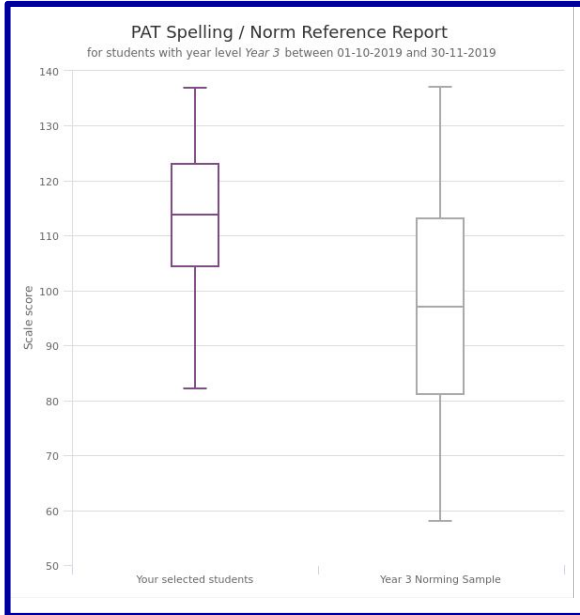
Structured Word Inquiry connected authentically with our whole school philosophy of inquiry, where children and classes explore words that are personally meaningful to them, by generating wonderings and developing and testing hypotheses. This scientific, evidence-based approach also aligned with our beliefs that inquiry should deepen student understanding of how our world (and language) works through investigation and discovery.



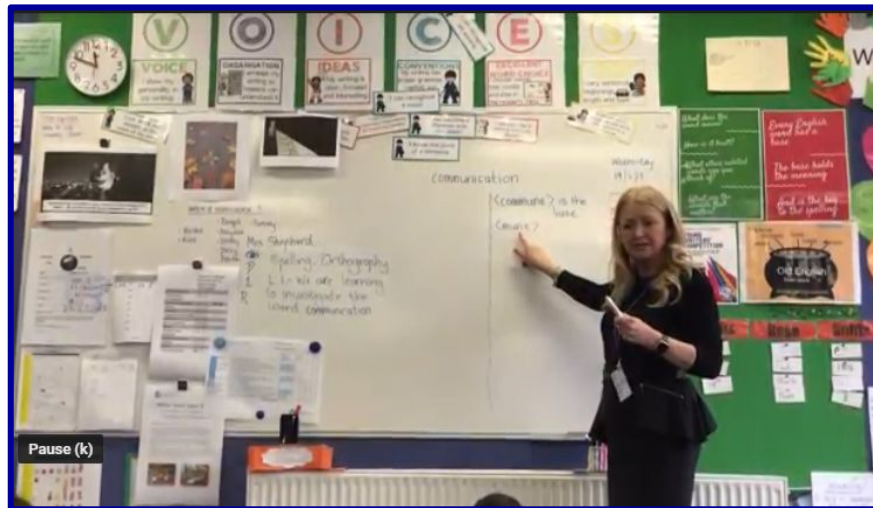
Supporting Teachers to Succeed

While the initial day of professional learning about Structured Word Inquiry provided teachers with inspiration and some tools and strategies to begin this journey with their students, we needed to provide a sustained approach to professional learning that supported teachers to succeed. With Julie, we co-designed a professional learning program for BNPS teachers that included her modelling lessons in classes, as well as after school professional learning. This professional learning structure supported teachers to see the connections between practice and theory. We conducted surveys and feedback sessions to gather information about teacher confidence in using different spelling tools and examined our refined practices in the teaching of spelling. Teachers developed Professional Development Goals (PDPs) aligned to the Annual Implementation Plan (AIP), to lift performance levels and student outcomes in Spelling.

It was very important to the success of this approach that we provided teachers with the opportunity to trial and test new ideas in addition to past practices, rather than immediately expecting them to replace prior spelling pedagogy. This action research cycle supported teachers to investigate for themselves “what worked” in a supported way and increased “buy in” when they saw the positive results with their students.



We also understood that we needed to track the impact of our newly developed orthography approach on student achievements in Spelling. We added yearly school-wide PAT Spelling assessments to our whole school assessment schedule.



Sustaining the Work

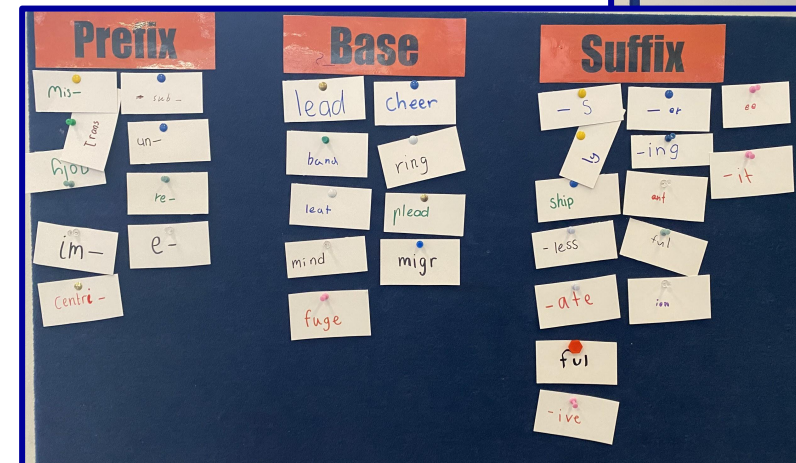
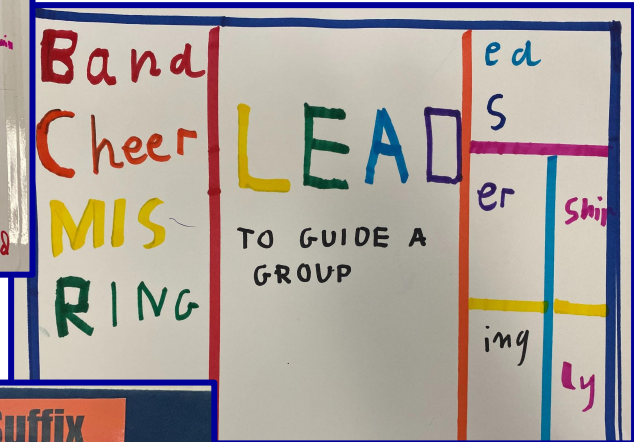
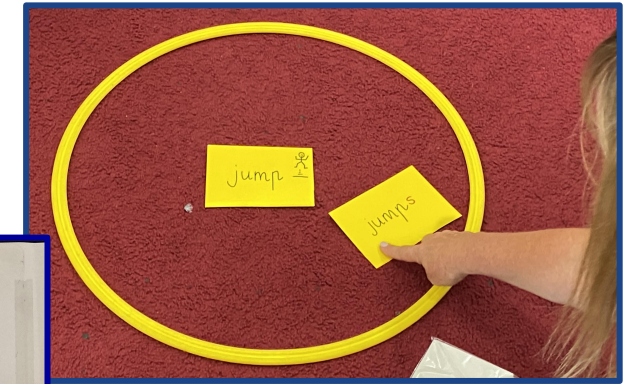
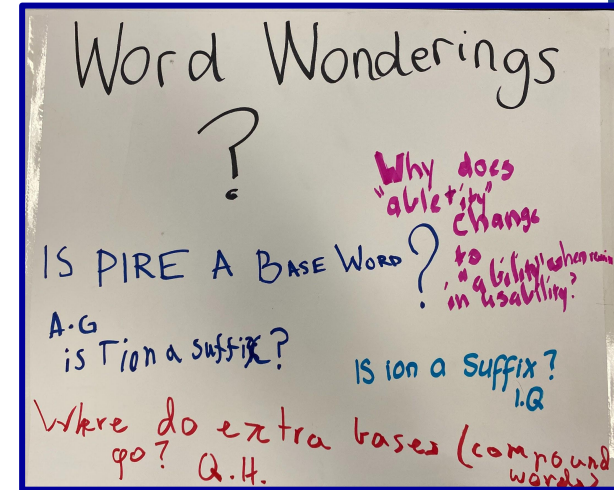
Documentation, Resourcing, Induction

To ensure consistent implementation of this approach, we developed a shared philosophy of Spelling, an instructional model to guide spelling lesson design, a scope and sequence of pedagogical tools, and a continuum of “I can” statements in Spelling, based on the Victorian Curriculum. All of this documentation was co-constructed, with input from the English and wider Teaching Teams.

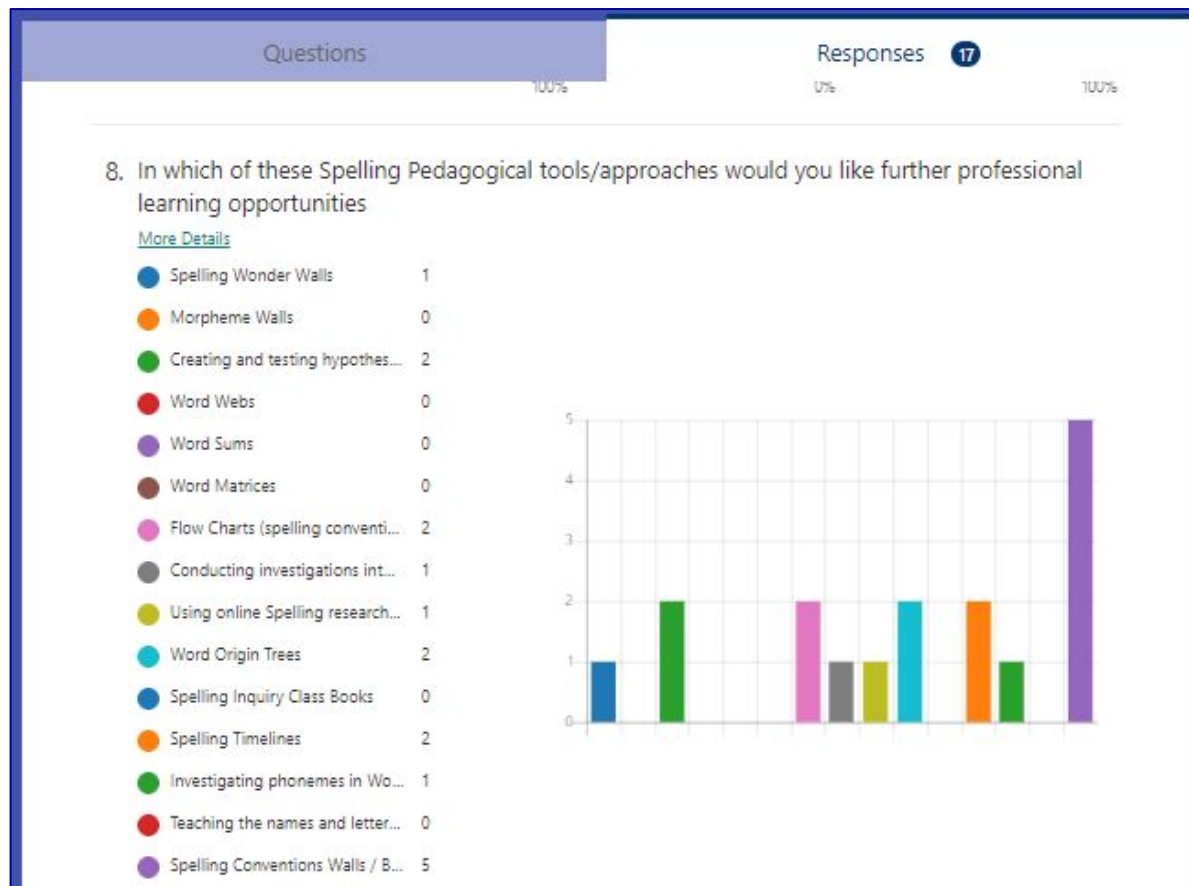
We captured best practice exemplars using pictures and video evidence and inducted new staff into the BNPS Spelling Approach.

We purchased materials to support the work, including Class Inquiry Sketch Books, hoops and cards for word sorting and morpheme work.

Analysis of PAT Spelling data across 2018-2019 showed above expected growth in Spelling across nearly all year levels for the first year of the implementation of this approach.



Teacher Consultation



Could only enter one answer in section 8. Would also like PD in: - Creating and testing hypotheses in Spelling - Conducting investigations into etymology (history and origins) of words - Word Origin Trees - Investigating phonemes in Words (orthographic phonology)

Spelling-related PD is something I need to increase my confidence in implementing it successfully in my practice.



I would like to have the opportunity to observe Julie working with a class group on Structured Word Inquiry (preferably a Year 1 or Year 2). Thanks

I would really love more PD with Julie Shepherd. I am having a go with the spelling inquiry, but I am not sure if I am 100% correct with particular words, their origins and their bases.

BNPS Spelling (Orthography) Philosophy



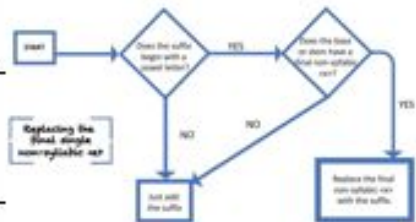
At Balwyn North Primary School, spelling is explored through word inquiries, where students' natural curiosity is fostered. Words investigated are meaningful to students and relevant to their learning and experiences. During these inquiries, students are word scientists, who hypothesise, investigate, test and research words. Throughout this process, students will come to understand the morphology (structure), etymology (history) and phonology (sounds) of words.

In order for students to achieve this, word investigations should be linguistically and scientifically rigorous. There are conventions, processes and key language important to this practice.

For students to write with ease, they need to know the letters of the alphabet, attempt to spell unknown words, proofread and edit their work to review spelling.

Exploring orthography is a journey that we go on together, where we generate wonderings, ask interesting questions and make discoveries about words to deepen our understanding of their meaning, spelling and how to use them in interesting and thoughtful ways.

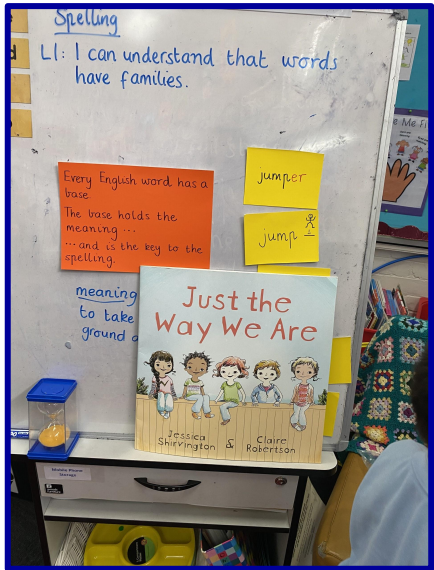
Lesson Stages:	Key Aspects/ Purpose	Essential Elements	Possible Inclusions	All stages
Provocation Tuning In 2- 5 minutes	The Provocation (Hook) is used to stimulate students' interest and curiosity and generate wonderings about words.	The Provocation (Hook) must be: <ul style="list-style-type: none"> · Interactive and engaging for whole group focus · Connected to the learning Intention 	The Provocation (Hook) might be used to choose interesting and relevant words to investigate further. Possible sources for words are: <ul style="list-style-type: none"> · What are we learning about? (transdisciplinary connections) · Literature · Real word experiences The Provocation (Hook) might use incorporate books, video clips, songs, simulations, photographs. This might also involve examining the class Spelling Book, to discuss previous wonderings and hypotheses.	Generate wonderings Creating / Testing hypotheses Adding to Morpheme Wall, Timeline and/or Class Spelling Inquiry Book / Displays
Front Loading Presentation 10 minutes	Front Loading (the Presentation) is used to introduce a concept, tool or process, to support students in their spelling inquiries.	Front Loading (the Presentation) must involve: <ul style="list-style-type: none"> · Learning Intentions and Success Criteria · A clear explanation of the task · Worked examples · Checking for understanding of concepts, tools or processes · Key language and scientifically rigorous processes aligned to Structured Word Inquiry. 	Strategies for Front Loading might include: <ul style="list-style-type: none"> · Linking students' prior knowledge · Explicitly introducing a new concept, tool or process · Revising a previously taught concept, tool or process · Modelling by teacher and/or student · Teacher verbalising their own thinking and use of strategies · Exploring "Where can we go for help?" with our inquiries. (E.g. resources, websites, experts) 	

Year level	Examples	Foundation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Teach the names of the letters of the alphabet		M, T	T, C	T, C	C	-	-	-
Teach Orthographic Phonology (sound – morpheme relationships)		T, C	T, C	T, C	T, C	T, C	T, C	T, C
Word Webs		M, T	M, T	T, C	T, C	T, C	T, C	T, C
Word Sums (students are announcing aloud and using proper conventions, such as check your joins) a c t + (plus) i n g → (is rewritten as) a c t i n g		M, T	M, T	T, C	T, C	T, C	T, C	T, C
Word Matrices		M (T3)	M, T	M, T	M, T	M, T	T, C	T, C
Flow Charts		-	-	-	M, T	M, T	M, T	T, C
Online Research Tools Etymonline (Online Etymology Dictionary)- http://www.etymonline.com/	Word Searcher- http://www.neilramsden.co.uk/spelling/searcher/index.html Mini-Matrix Maker- http://www.neilramsden.co.uk/spelling/matrix/index.html Etymology Explorer- https://www.etymologyexplorer.com Google Define- www.google.com Google Translate- https://translate.google.com.au/ Membean (Vocabulary Learning)- https://membean.com/treelist	M (informal) Tell rather than research	M (informal) Tell rather than research	M (informal) Tell rather than research	M, T	T, C	T, C	T, C

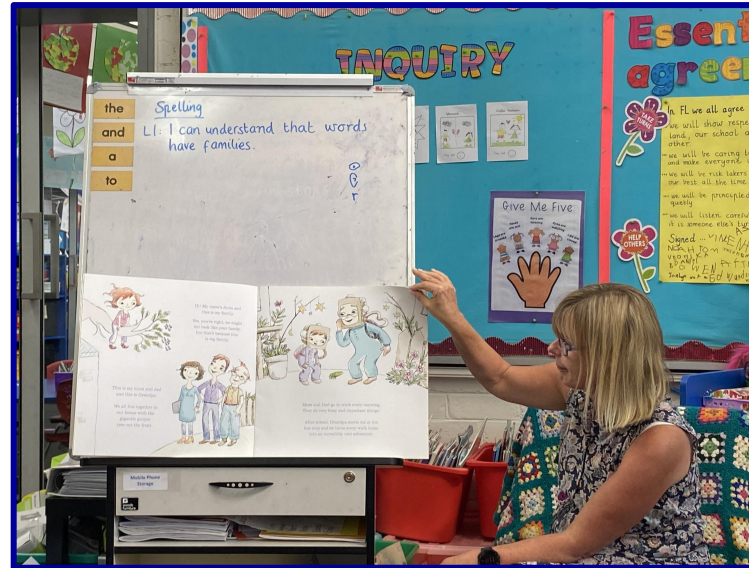
Structured Word Inquiry- Lower Primary

An area of importance for junior school teachers was that phonology would remain a focus, with a strong emphasis on sound-symbol relationships.

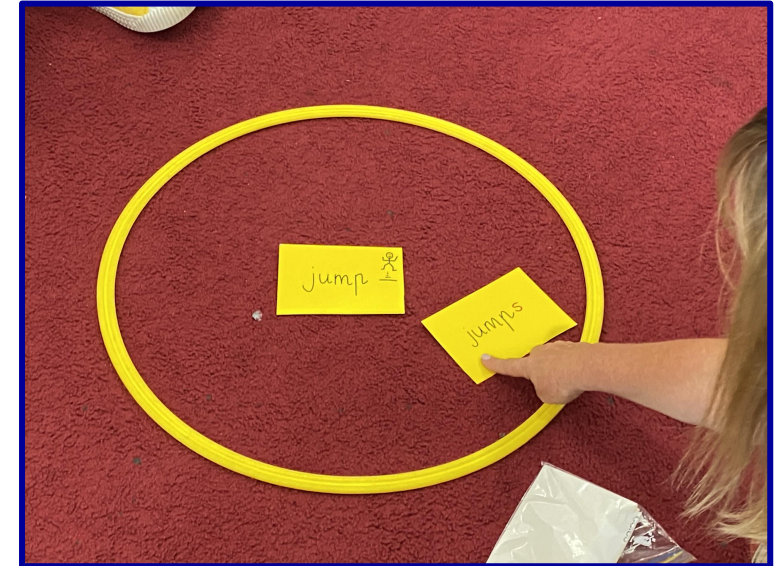
Teachers discovered for themselves that phonology, learning about graphemes (letters and letter combinations) and the sounds (phonemes) they make within words, are a key feature of word investigations.



Discussing our families...
and the concept that
words have families too.



Starting with a big book
provocation.

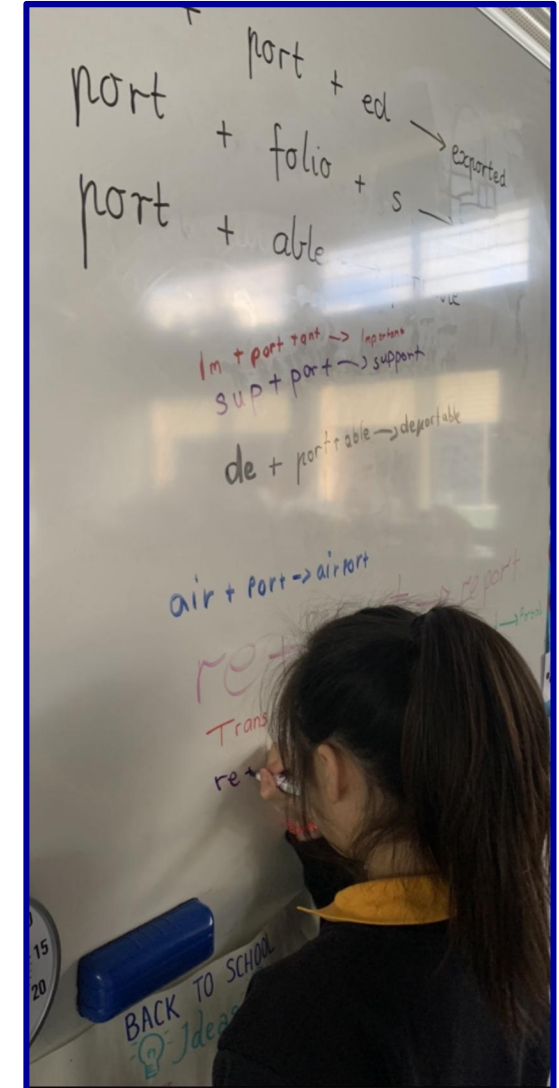
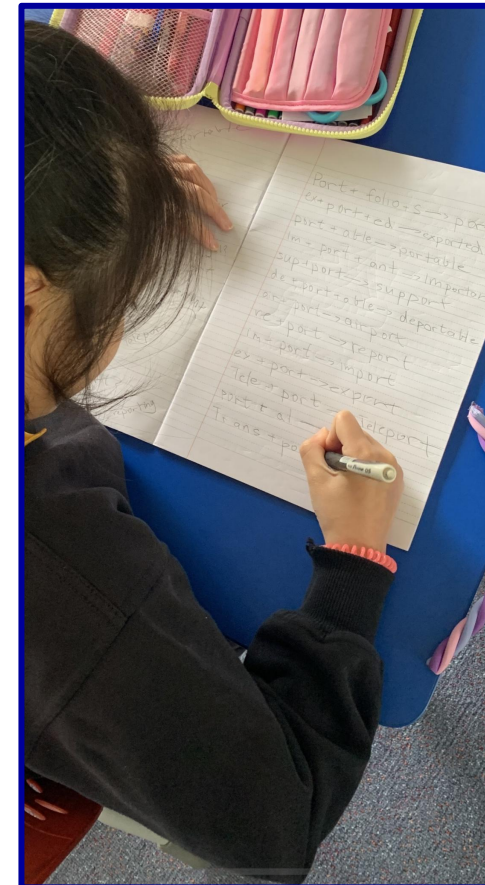
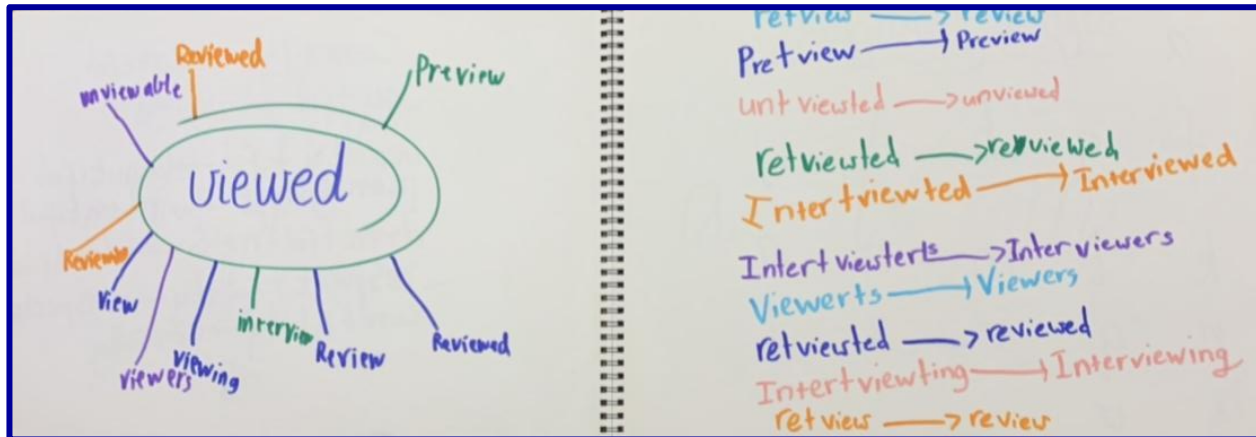


Investigating the base 'jump'
and other words that belong
in its family.

*'Every English word has a
base. The base holds the
meaning and is the key to the
spelling.'*

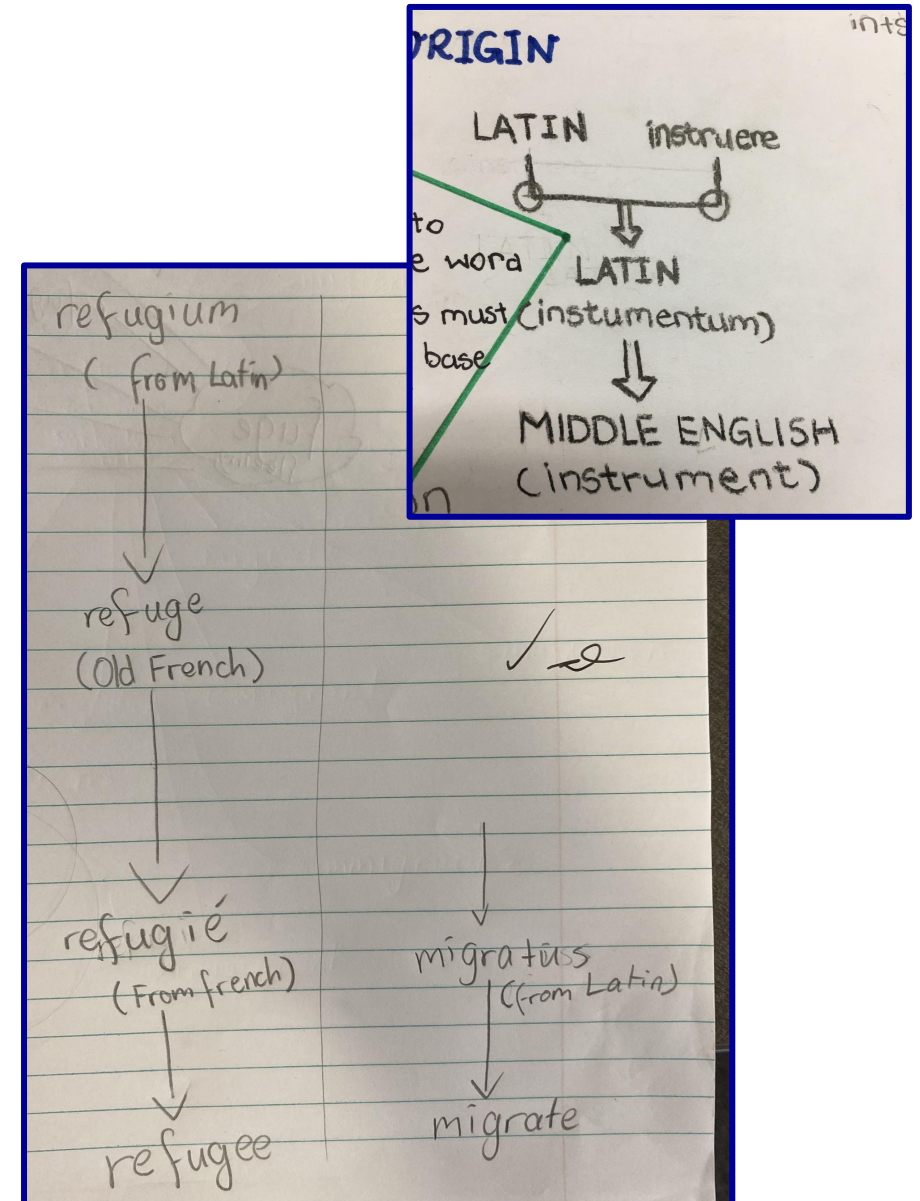
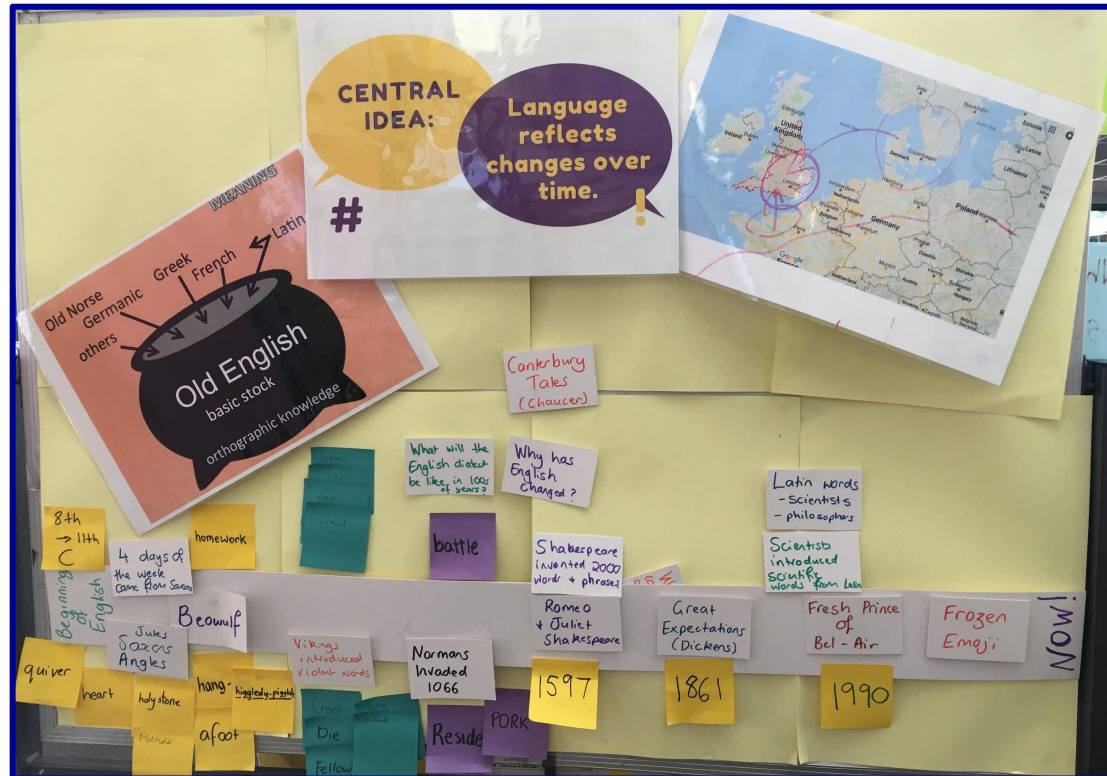
Structured Word Inquiry- Middle Primary

As children move into the middle years of primary school, they become gradually more independent in their investigations. As 'word scientists', they hypothesise the base elements of words and their meanings. They create word webs, matrices and word sums with growing independence. The words chosen relate to current events at school and wonderings that have arisen from students themselves. Teachers facilitate research and discussion surrounding the etymology of words and how their use has evolved overtime.



Structured Word Inquiry- Upper Primary

Students in Years 5 and 6 enjoy deepening their understanding of words through the layers of meaning imbued through their etymology. We explore how historical events, such as invasions and migrations have influenced and left their vestiges in English spellings and meanings. Students routinely investigate words connected to their Units of Inquiry or personal interests.



Phonology- Sound/Symbol Relationships

Using authentic texts, students become detectives, investigating the different sounds that can be found in words. They explore how one phoneme (sound) can be represented by a wide variety of graphemes (letters, or letter combinations). Students are often surprised by the diverse combinations of letters that can make one sound. (E.g. /s/ can be represented by <ch> in *chandelier*, <s> in *sugar* and <t> in *competition* and many more. They can then apply these understandings to their own spelling attempts.

The long /o/ sound

load, boat, know, follow, rhino, Joe, hippo, ocean, poke, solve, take, Joe, eye, eyesight, eye wall, to

The long /i/ sound

eye, try, moonlight, nightmare, light, find, pilot, primary, like, wife, time, terrified, pie, lie

The long /e/ sound

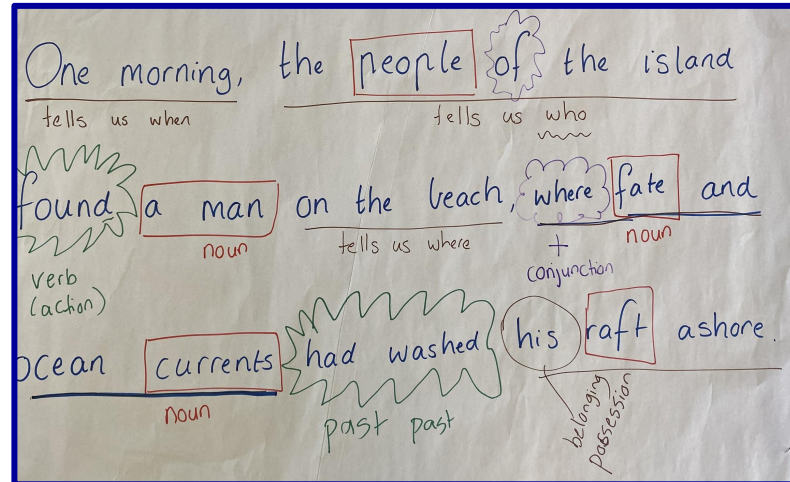
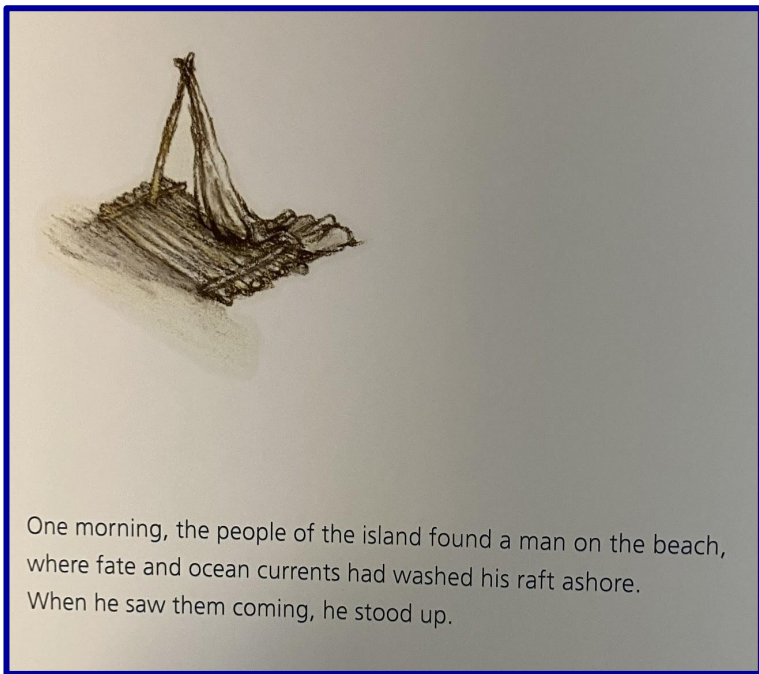
unique, Merri, Olivia, morie, every, lazy, everything, read, Thneed, seed, eel, she, he, repurpose

long /a/ sound

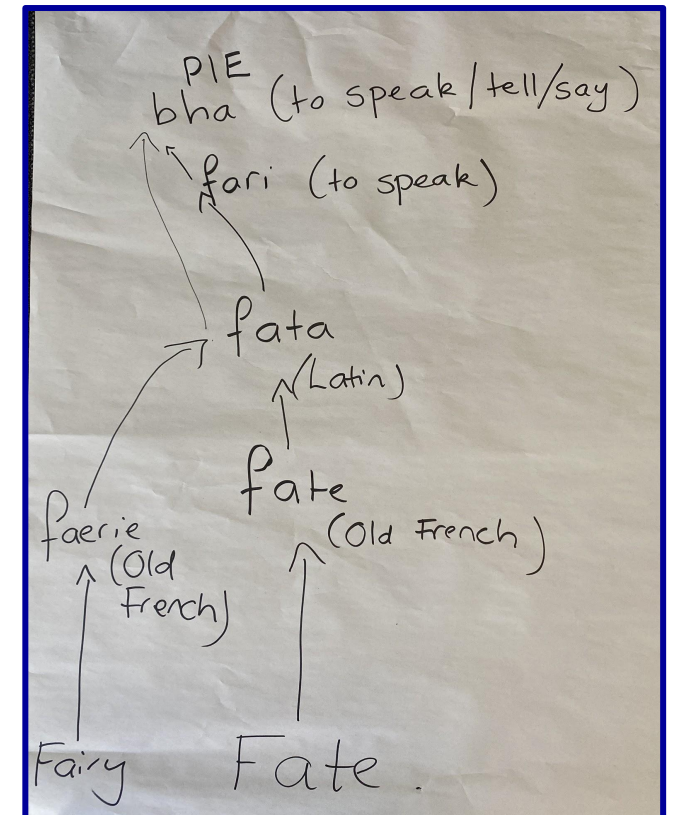
play, away, pay, day, Friday, rain, pain, train, chain, again, plain, paint, aid, grain, drain, plane, ate, paper, rage, gave, stage, eight, neigh, rein, April, able, lazy, brave, baby, crazy, gravy

Links to Mentor Text Inquiries

Students across the school engage in regular mentor text inquiries. They undertake guided inquiries into sentence level grammar and the impact of powerful writing choices, in order to unravel the mechanics of writing and add newly discovered techniques to their own repertoires. This work has not only lifted student outcomes in Writing, but inspired a deeper engagement and passion for literature for students, teachers and across our community. An important aspect of these inquiries is the chance for students to delve deeply into the interesting language choices that authors make and a key tool for this has been Structured Word Inquiry.



Exploring “fate” from the picture book “The Island”, by Armin Greder.



Learning from Home

Through the 2020 Learning From Home periods, teachers demonstrated ingenuity and persistence as they continued to provide Structured Word Inquiry experiences for students. Teachers knew that best practice in classrooms, can also translate to best practice during remote learning. Students took the opportunity to independently research and explore new words and orthographic structures and share this learning with their peers.

Structured Word Inquiry- Morphology

Wednesday, 20 May 2020 7:38 AM

Word Sums

learn ---> learn
learn + ing ---> learning
learn + ed ---> learned
learn + t ---> learnt
learn + er ---> learner
learn + er + s ---> learners
un + learn ---> unlearn
un + learn + s ---> unlearns
un + learn + ing ---> unlearning
un + learn + ed ---> unlearned
re + learn ---> relearn
re + learn + ing ---> relearning

Word Web

Add words to your word web here!

Learn To get new knowledge

learn, learning, learned, learnt, relearn, learner, Learners, relearning, unlearn, unlearns, unlearning, unlearned, unlearned

amsden.co.uk/spelling/matrix/temp/index.html

Teaching Home Learning BNPS- Ride, Run or... Safeyoutube BNPS Compass Home Learning Pag...

Instructions

1. Choose a working base. [example](#)
2. Optionally add a denotation. [example](#)
3. Write word sums around that base:
 - one sum per line;
 - with or without rewrite arrows and a target word;
 - use an initial capital letter for any base element.[example](#)
4. Press Update to draw the matrix.

Working Base

Spelling (initial capital):

Denotation:

Update

[Clear all data](#)

Show

☒ Instructions
☐ Matrix-only in results page
[Help](#)

[go to matrix home page](#)
[go to morpholov home page](#)

Word sums (one per line; eg. Like + ing --> liking; or just Like + ing)

pump + s --> pumps

Structured Word Inquiry- Joining Conventions

Thursday, 28 May 2020 6:40 PM

Choose one of these words to investigate: **move stop**

Word Sums

Mov + ed ---> moved
Mov + er ---> mover
Move + s ---> moves
Mov + er + s ---> movers
Re + move ---> remove
Re + move + ed ---> removed
Re + mov + er ---> remover
Re + move + s ---> removes
Re + mov + er + s ---> removers
Re + move + able ---> removable
Un + mov + er ---> unmoved
Move + able ---> moveable
Move + ment ---> movement
Mov + ing ---> moving

Word Web

move

moved, mover, moves, movers, remove, removed, remover, removes, removers, removable, movement, moving, moveable

START

Does the suffix begin with a vowel letter?

YES

NO

Does the base or stem have a final, single, silent <e>?

YES

NO

Just add the suffix.

Remove the single, silent <e> before you add the suffix.

When you first started it's a bit hard, but if you keep practising, you'll find out that it's not that hard - Amy, Year 3

I like to make the new words. It makes it easy to spell and say words - Jason, Foundation

The suffix is at the end. The prefix is at the beginning - Albert, Foundation

It's not just spelling but kind of history and it helps write lots of words - Tam, Year 3

Student Voices on Structured Word Inquiry

'It helps me read, because it helps me remember how the word is made up.'
Thomas, Foundation

We have to make sure that the base is the same and put letters at the end or the beginning to make family words.'
Eddie, Foundation

'It is a good way to learn new words.'
Vedhika, Foundation

'We start with a small word called the base and we can make words in the family. They have to mean the same thing as the base.'
Vedhika, Foundation

Online Resources

Research Tools:

- Etymonline (Online Etymology Dictionary)- <https://www.etymonline.com/>
- Word Searcher- <http://www.neilramsden.co.uk/spelling/searcher/index.html>
- Mini-Matrix Maker- <http://www.neilramsden.co.uk/spelling/matrix/index.html>
- Etymology Explorer- <https://www.etymologyexplorer.com>
- Google Define- www.google.com
- Google Translate- <https://translate.google.com.au/>

Professional Learning:

- WordWorks Literacy Centre (Pete Bowers) - <http://www.wordworkskingston.com/WordWorks/Home.html>
- Michel Rameau- <https://www.realspellers.org/>
- Making sense of spelling - Gina Cooke (YouTube Clip)- <https://www.youtube.com/watch?v=0mbuwZK0lr8&vI=en>
- Beyond the Word- An Orthographic Learning Journey (Lyn Anderson)- <http://wordsinbogor.blogspot.com/>
- Caught in the Spell of Words- <https://caughtinthespellofwords.wordpress.com/>

Foundation for Learning and Literacy Touchstones

The *Foundation for Learning and Literacy* congratulates the principal, past principal and staff of Balwyn North Primary School and thanks them for sharing their story. They put the Foundation's Touchstones into action, in particular, the following:

1. A fair and equitable society depends upon every citizen being able to read and write. Being able to read and write gives people equal access to information, employment, enjoyment and further educational opportunities.
3. Reading and writing are both pleasure and power. They allow us to participate in the real world, escape from reality and imagine alternative worlds. These purposes should be at the heart of teaching children and young people to tell stories, read and write.
5. 'Making sense' is the beginning, middle and end of learning to read and write.
10. Teachers teach children. Programs don't.

Acknowledgements

Congratulations to the Leadership team and staff at Balwyn North Primary School, with particular thanks to Erika Bienert (principal until 2020) and Tony Stokes (current principal).

A special thank you also to Lisa Cuthbert-Novak, Sue Lyness, Christina Reid, Maddie James & Anastasia Parker for sharing their Orthography journey.