By rule or by rote? To what extent does children’s spelling improve as a result of learning words with the look, say, cover, write, check, fix strategy compared with phonological spelling strategies?

Dr Sue Dymock & Professor Tom Nicholson
22 November 2017, NZARE, Hamilton
Spelling

ass-ee-9
lick-we-fye
dessy-kate
sep-er-8
few-sha
sack-ree-lidge-as

(Acknowledge: Diane Montgomery; Professor Rhona Stainthorp)
Is spelling important? Spelling mistakes are common in the adult world – examples from newspaper ads etc.

Clashical music lessons
George Foreman, large rooster, $150
Small slimeline fridge
Rotary gives grade 4 a vocabulary boost
Contractors were quick to stem the tide after a water man burst
For sale. Pony poo. Big socks. $20 for 5 bags.
My Dad say’s boy’s rule! (on a t-shirt)
While your hair is still wet run a good dollop of mouse through it
I feel like a kiwi born and bread
Is spelling important?

To Sue Dymock
Waikato University
Hamilton
Heading “OOPS: Embarrassing spelling mistakes at Splash Planet amusement park in Hastings had to be corrected yesterday.”
Is spelling caught or should it be taught?

There is a good deal of research that suggests that children will not learn to spell unless instructed (Adams, 1990; Woloshyn & Pressley, 1995).

However - the common weekly spelling test assumes that words are learned best by memorisation and testing – but is this the best way to learn to spell?
A recent New Zealand survey (McNeill & Kirk, 2014) found that:

1. Nearly 70% of teachers said they did not receive enough preparation in their teacher training to teach spelling

2. More than 50% of teachers used spelling lists to teach spelling

3. More than 90% of teachers said it was important to teach how to spell words by their sounds but most did not do that in practice
The teaching of spelling in New Zealand

In a smaller study it was found that:

1. Teachers in the school were using 29 different approaches to teach spelling
2. More than 50% said they lacked confidence in teaching spelling

(Morris, 2012)
2015 survey: Do you think spelling is a hot topic at the moment? (by "hot" we mean popular, people are very interested in teaching spelling)

<table>
<thead>
<tr>
<th>Answer Choices</th>
<th>Responses (N=123)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, it’s cold</td>
<td>15% (n=18)</td>
</tr>
<tr>
<td>It’s warm</td>
<td>50% (n=62)</td>
</tr>
<tr>
<td>It’s hot</td>
<td>29% (n=36)</td>
</tr>
<tr>
<td>It’s very hot</td>
<td>6% (n=7)</td>
</tr>
</tbody>
</table>
Why is it cold?

Theme 1 – Not as important as other things
• Just another thing to add to an overloaded curriculum
• Much professional development (PD) steers away from spelling to engagement and interest
• The focus is more on reading

Theme 2 – New digital age – spelling not seen as important
• A lot more people don’t view spelling as important any more

Theme 3 – It’s cold because there is no PD on it
• Haven’t had any compulsory PD on spelling yet

Theme 4 – Nothing new
• There is nothing “new” about spelling and considering new ways to teach it
Why is it “warm”?

Theme 1 – Technology is passing it by
• Spelling is not so important nowadays
• Does not hold same importance it once did
• With the digital age we are in - many people consider that students only require basic spelling

Theme 2 – Many pupils find spelling difficult
• Our tamariki (chn) need to know about the kupu (words) they are learning

Theme 3 – No certainty about how to teach spelling
• I think there is no proven process to teach spelling
• My team aren’t sure of a good programme
• Often teachers are not sure how to teach spelling
• Some teachers think it is in the “too hard” basket
Why is it “hot” or “very hot”?

Theme – It’s hot in the sense that it is needed

• It is such a weakness in schools and there are not many spelling programmes that are simple and easy to use
• Achievement is falling in this area
• We are worried about our students’ low level of achievement
• Spelling levels are low
• Many children coming out of primary school with a low spelling age
• Our children’s spelling is terrible
• Lots of parents keen for their children to be good spellers
• Spelling knowledge and standards have slipped
• Weakness of our writers
The English writing system - teaching sequence (Henry 2010)
Four Faces of Spelling

1. Phonological (sounds), e.g., Turtle Talk
2. Orthographic (spellings), e.g., eat, cow
3. Morphemic (meaning units), e.g., rabbit-rabbits, look-looked, erupt-disrupt, sign-signal, heal-healthy
4. Semantics (meaning), e.g., sail/sale, pane/pain, rain/rein/reign
Analysis of spelling miscues – why do they occur?  
(from WRAT-4 spelling test)

<table>
<thead>
<tr>
<th>Child</th>
<th>will</th>
<th>cut</th>
<th>arm</th>
<th>dress</th>
<th>shout</th>
<th>train</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>well</td>
<td>cit</td>
<td>aim</td>
<td>dres</td>
<td>shot</td>
<td>throrn</td>
</tr>
<tr>
<td>2</td>
<td>will</td>
<td>cut</td>
<td>amr</td>
<td>dress</td>
<td>shuot</td>
<td>trin</td>
</tr>
<tr>
<td>3</td>
<td>will</td>
<td>cut</td>
<td>arm</td>
<td>dress</td>
<td>shout</td>
<td>train</td>
</tr>
<tr>
<td>4</td>
<td>will</td>
<td>cut</td>
<td>arm</td>
<td>dress</td>
<td>shout</td>
<td>train</td>
</tr>
<tr>
<td>5</td>
<td>will</td>
<td>cut</td>
<td>ame</td>
<td>dres</td>
<td>showt</td>
<td>tran</td>
</tr>
<tr>
<td>6</td>
<td>will</td>
<td>cut</td>
<td>amr</td>
<td>dress</td>
<td>shout</td>
<td>train</td>
</tr>
<tr>
<td>7</td>
<td>will</td>
<td>cut</td>
<td>arme</td>
<td>dres</td>
<td>shout</td>
<td>train</td>
</tr>
<tr>
<td>8</td>
<td>will</td>
<td>cut</td>
<td>urm</td>
<td>dres</td>
<td>showt</td>
<td>tran</td>
</tr>
</tbody>
</table>
Analysis of spelling miscues – why do they occur? (from WRAT-4 spelling test)

<table>
<thead>
<tr>
<th>Word</th>
<th>Spelling</th>
<th>Why?</th>
</tr>
</thead>
<tbody>
<tr>
<td>cut</td>
<td>cit</td>
<td>Short vowel confusion</td>
</tr>
<tr>
<td>dress</td>
<td>dres</td>
<td>Doubling rule - The letters that do this are F, S, Z, L</td>
</tr>
<tr>
<td>shout</td>
<td>shot</td>
<td>ou vowel digraph</td>
</tr>
<tr>
<td>train</td>
<td>tran</td>
<td>Ai vowel digraph to represent long a</td>
</tr>
</tbody>
</table>
The Study
To what extent does children’s spelling improve as a result of learning words with the look, say, cover, write, check, fix strategy compared with phonological spelling strategies? (Dymock & Nicholson, 2017)
The Problem

The problem

more than one in four students struggle with spelling, e.g., from Year 3: examples of spelling ----

“I bilt a snoeman”
“lisins” for “licence”
“skwetting” for “squirting”
“poleas” for police
“scool” for school

“my friend gros vegdabills”
“tikit” for “ticket”
“diled” for “dialed”
“wat” for “what”
“sed” for said
Method

Research question: Is it better to teach by rule or by rote?

Participants: 55 Year 3 children in two classrooms

Groups:

a) Phonics rule-based (strategy group)
b) Visual-based as in look, cover, write, compare, check, fix
c) Control: Read story, non-spelling activities, e.g., punctuation, narrative text structure, vocabulary

Procedure: 3 lessons a week, 20 minutes per lesson, for ten weeks, tested on 15 words, learned 10 and 5 transfer words
### Method – Strategy Group

#### The Big 8 Spelling Rules

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Short vowel sounds</td>
</tr>
<tr>
<td>2</td>
<td>Split vowel digraphs</td>
</tr>
<tr>
<td>3</td>
<td>Consonant digraphs</td>
</tr>
<tr>
<td>4</td>
<td>Rabbit rule</td>
</tr>
</tbody>
</table>

#### Vowel digraphs

- at
- egg
- in
- on
- up

#### Silent e rule

- ate
- Eve
- time
- hope
- cute

#### Consonant digraphs

- ch - church
- sh - ship
- wh - when
- th - that

#### Doubling rule:

- rabbit
- dinner
- middle
- spanner

#### More long vowel sounds:

- ai, ay – rain, ray
- ee, ea – keep, meat
- ie – pie, sigh
- oa – oat, boat
- ue, ew – blue, new

#### r-controlled vowels

- ar - car
- er - her
- ir - sir
- or - for
- ur - fur

#### Turtle Talk

- Cut up the word into sounds
  - sh-o-p
  - s-p-ar-k
  - b-r-igh-t

#### Syllable splitting

- Every syllable has a vowel sound:
  - car-pet
  - mag-net-ic
  - a-corn
  - io-king
Doubling rule – letters s, f, l and z  
(Strategy group)

“Today we are going to learn a new spelling strategy called the doubling rule. The doubling rule came about because printers in the old days wanted to have a way to spell words so that the reader did not get confused. For example, when you see the word “of” do you say “ov” or “off”? So to make it clear they used the doubling rule.”

“The doubling rule in spelling is when you spell the same letter twice. You use these double letters after a short vowel sound – but only for certain letters.”

tell          staff          dress          buzz

call          off            grass          fuzz
Doubling rule – spelling strategy

• The doubling rule is sometimes called the rabbit rule. Why is it the rabbit rule?

• When you spell rabbit be sure to double the b so the reader knows the vowel before it has a short sound – don’t spell it as rabit because people will think you are meaning ray-bit.

• Let’s look at the doubling rule with the word run. If we want to add +ing to the word run do we write runing? No because that would be rue – ing (the u vowel would become long). We need to double the consonant n to keep the vowel (u) short.
Resource: extract from the story “The Stowaway”

Doubling rule (words from story – “The Stowaway”)

- chatted
- snuggle
- filled
- dinner
- happened

- buddy
- patted
- running
- sitting
- shipping

The workers at the factory chatted to Walter. Sometimes they gave him scraps of food. He really liked the ham from their sandwiches.

Walter’s best buddy at the factory was Ernie. At morning tea time, Walter liked to snuggle on Ernie’s lap while Ernie patted him.
Trained words: Results

Mean scores for trained spelling words

![Bar chart showing mean scores for trained spelling words across different groups (Strategy, List, Book) for pre-test and post-test results.](chart)
Transfer words: Results

Mean scores for trained spelling words

![Bar graph showing mean scores for trained spelling words across different groups and test phases.](image-url)
Good spellers can spell regular non-words and irregular words

Our findings showed that in order to spell irregular (nonphonetic) words students needed to be able to spell pseudowords – that is be able to spell phonetically. Students without good pseudoword spelling skills were not good at spelling irregular words.

Scatterplot showing spelling of irregular words compared with non-words
Comments from students: What has helped you the most?

Strategy group

The rabbit rule; The doubling rule

The magic e

Clapping the syllables

“The rabbit rule and the magic e and the a e i o u thing”

List group

“Well … the look cover starjey [strategy]”

Book reading group

Enjoyed learning about vocabulary, story structure, punctuation
From the classroom teacher

This afternoon one of the students asked, “How do you spell describe?”

I heard this group help him sound it out and one of the students reminded him what to do at the end of the word when you hear the name of the vowel. Iain piped up and said, “We learnt about the magic e today with our spelling teacher.”
The Noble

With a little imagination
you can make the ordinary
extraordinary! And also your
extraordinary already exist an
extraordinary!
Spelling

asinine
liquefy
desiccate
separate
fuchsia
sacrilegious
Further reading


