Unveiling the Logic of English Spelling

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VBIDA
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Why Teach Spelling?

• Better spelling leads to better writing (Berninger and Richards, 2001; Moats and Foorman, 2004; Graham et al.)
• Spelling knowledge facilitates vocabulary and reading (Vellutino et al., 2007, SSSR)
• Spellchecker is insufficient
• Spelling is not learned by reading alone
Take This Spelling Test

What knowledge do you employ when you spell: ____________________________?

___________________________?

___________________________?

___________________________?
Research suggests that spelling involves more than rote “visual” (orthographic) memory; those who spell well can think about the internal details of words:

- the sounds (phonology)
- individual sound-symbol correspondences
- letter patterns (orthographic conventions)
- meaningful parts (morphemes)
- what language the word came from
- the meaning of the word in a sentence

(Ken Apel, Julie Masterson)
Coil Pot Reflection

The thing I learned about doing this project is that you should not trust any one with your pot. But before someone dropped it, it was going fine. The only problem was I did not smooth done the inside and outside.

I think that it was important to watch the move "Maria Martinez" because it made us have ideas and push you to think.

The People

1). "We come into the world pottery we are going to leave the earth with pottery."

2). The native americans use pottery for eksprachen

3). A form of entertain ment and was used daily for chores

4). The changes I would do is make it stand up right
Assessment

• Use a spelling inventory to determine instructional needs

• Use a norm-referenced measure such as the Test of Written Spelling – 4, or the Wide Range Achievement Test to measure relative standing
What Can Be Taught?

1. Speech sound segmentation and identity (phoneme awareness)
2. Phoneme-grapheme mapping
3. Letter sequences, syllable patterns
4. Morphology and word origin
5. Grammar and usage
6. Proofreading, self-correction
The Start Point: Phonological Awareness (PA)

Phoneme Segmentation

ice _______  sigh _______
peak _____  keep ____
weight _______  cheese _______
song _______  fox _______
The Consonant Phonemes

<table>
<thead>
<tr>
<th></th>
<th>lips</th>
<th>teeth on lips</th>
<th>between teeth</th>
<th>behind teeth</th>
<th>roof of mouth</th>
<th>back of throat</th>
<th>glottis</th>
</tr>
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<tbody>
<tr>
<td>stops</td>
<td>/p/</td>
<td></td>
<td>/t/</td>
<td>/k/</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<td>/n/</td>
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<tr>
<td>fricatives</td>
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<td>/th/</td>
<td>/s/</td>
<td>/sh/</td>
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<td>/th/</td>
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<td>affricates</td>
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<td>/ch/</td>
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<td>/j/</td>
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<td>/h/</td>
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<td>glides</td>
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<td></td>
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<td>/wh/</td>
<td>/w/</td>
<td>/h/</td>
<td></td>
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<tr>
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<tr>
<td>voiced</td>
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<tr>
<td>liquids</td>
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<td>/l/</td>
<td>/r/</td>
<td>/l/</td>
<td></td>
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<td>/h/</td>
<td></td>
</tr>
</tbody>
</table>
Phoneme Substitution

shop /sh/ /ch/  chin /ch/ /f/
them /th/ /h/  shack /sh/ /h/
thick /k/ /n/  thus /th/ /f/
crush /u/ /a/  shack /a/ /o/
thrash /th/ /k/  thank /a/ /i/
Sound Substitution With Colored Blocks

- Show me “shop.”
- Now show me “chop.”
- Now show me “chip.”
- Now show me “chick.”
Vowel Chart (Moats)
Learning the Vowel Chart

beet
bit
bait
bet
bat
(butte)

boot
put
boat
bought
bite
butt
bottom
Vowel Sorts – Front Vowels

Set #1:  babe, pat, pie, be, pet, pit, 
         flea, beg, fly, bag, big, paid

/ê/  /ĩ/  /ā/  /ě/  /ã/  /ī/
Vowel Sorts -- Low Vowels

Set #2: pop caught swat laundry
love father trouble off
frog putt thought of

/aw/ /õ/ /ũ/
(saw) (ox) (up)
Building Words With Graphemes

Say a word; students build the word.

Students make as many words as they can, working in teams.
Phoneme-Grapheme Mapping

- Use this grid to map phonemes to graphemes.
- Each square is one phoneme.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>e-gg</td>
<td>p-u-ck</td>
<td>j-a-zz</td>
</tr>
<tr>
<td>ch-u-m</td>
<td>s-t-r-u-ng</td>
<td></td>
</tr>
<tr>
<td>b-o-mb</td>
<td>c-a-tch</td>
<td></td>
</tr>
</tbody>
</table>
PGM Procedure  (Kathi Grace)

• Always use one sound per box
• Spell words conventionally- **no invented spelling**
• Students have grid paper, chips and a pencil. In large groups, teachers use an overhead projector, chips, and a marker
• Say the word and have students lay out chips for number of sounds in a word
Then, box-by-box, write in graphemes with students, naming each letter aloud

Ask students: *What sounds do you hear?*

Then ask: *What letters do you write?*

As they name the letter(s) for each sound, they write them in each box.

Tricky patterns: digraphs (one box), blends (two boxes), *qu* (two boxes, close together) and *x* (across two boxes)

Silent-*e* is mapped as having the silent-*e* in the corner of the box with the final consonant, as it has no sound.
Practice, Phoneme-Grapheme Mapping

Map these words:
• mop
• bugs
• shut
• flash
• wax
• brag

Map these words:
• smoke
• which
• hang
• quit
• ring
• cake
Word Sorting: Discovery of a “Choice” Pattern

• Why? To focus attention on both pattern and position of the sound-spelling
• To engage learners
• To provide practice
• To encourage inductive reasoning
Examples of Grapheme Patterns ("Choice" Spellings)

<table>
<thead>
<tr>
<th>/k/</th>
<th>/f/</th>
</tr>
</thead>
<tbody>
<tr>
<td>cabbage</td>
<td>sphere</td>
</tr>
<tr>
<td>kitten</td>
<td>cough</td>
</tr>
<tr>
<td>package</td>
<td>fluff</td>
</tr>
<tr>
<td>school</td>
<td>foggy</td>
</tr>
<tr>
<td>question</td>
<td></td>
</tr>
</tbody>
</table>
Word Sorting to Understand a Pattern: /k/, /c/, /ck/

<table>
<thead>
<tr>
<th>cactus</th>
<th>stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>cost</td>
<td>fleck</td>
</tr>
<tr>
<td>cusp</td>
<td>buckskin</td>
</tr>
<tr>
<td></td>
<td>blacktop</td>
</tr>
<tr>
<td>kite</td>
<td></td>
</tr>
<tr>
<td>kennel</td>
<td>milk</td>
</tr>
<tr>
<td>skill</td>
<td>stink</td>
</tr>
<tr>
<td>napkin</td>
<td>jerk</td>
</tr>
</tbody>
</table>
The -ff, -ll, -ss Doubling Rule

-ff
- puff
- stuff
- gruff
- off
- stiff
- fluff
- whiff

-ll
- will
- spell
- doll
- still
- fell
- shell
- dull

-ss
- dress
- grass
- fuss
- miss
- class
- floss
- press

Exceptions:
- yes
- bus
- gas

Words ending in /z/
(is, has, his, ...)

Exceptions:
- if
- of
- gal
- pal
Consonant Oddities:

*qu* and *x*

queen = /kwēn/
mix = /mĭks/
exact = /ĕgzăkt/
A Spelling Pattern: “Huge Smudge”

Final spellings for /j/- ‘ge’ or ‘dge’

<table>
<thead>
<tr>
<th>dodge</th>
<th>judge</th>
<th>verge</th>
</tr>
</thead>
<tbody>
<tr>
<td>village</td>
<td>stage</td>
<td>indulge</td>
</tr>
<tr>
<td>pledge</td>
<td>page</td>
<td>message</td>
</tr>
<tr>
<td>badge</td>
<td>fringe</td>
<td>damage</td>
</tr>
</tbody>
</table>
Homophones Need a Meaningful Context

Using their, they’re, there…

“If ________ late again, I will eat my hat,”
said Ethyl.

When we got ______ late, we saw Ethyl eating her hat.

“_____ never going home to _____ own house unless we drive them ______.”
Homophone Home

Thunker herd a noise like a grown coming from hi above hymn. He guest that it was coming from the beach tree buy his feat. Thunker stared upward wear he saw something with black fir. “It’s a bare up their!” Thunker balled.

Now, Thunker had never scene a bare be four and he didn’t no what two dew. In his panic, Thunker tried to flea, butt he tripped over a tree route. He landed on his knows which caused him grate pain.
Syntax: Split Personality Words

*Sponge* can be a noun or verb...

The _________ sponge________________________
__________________________________________.
Every day, we sponge __________
__________________________________________.
### Syllable Spelling Conventions

<table>
<thead>
<tr>
<th>Closed</th>
<th>Open</th>
<th>VCe</th>
</tr>
</thead>
<tbody>
<tr>
<td>dap</td>
<td>ma</td>
<td>trite</td>
</tr>
<tr>
<td>con</td>
<td>wri</td>
<td>bune</td>
</tr>
<tr>
<td>bot</td>
<td>bu</td>
<td>tane</td>
</tr>
</tbody>
</table>

### Vowel Team

<table>
<thead>
<tr>
<th>Vowel Team</th>
<th>Vowel-R</th>
<th>-Cle</th>
</tr>
</thead>
<tbody>
<tr>
<td>tain</td>
<td>var</td>
<td>-gle</td>
</tr>
<tr>
<td>geal</td>
<td>ter</td>
<td>-tle</td>
</tr>
<tr>
<td>rain</td>
<td>dor</td>
<td>-ple</td>
</tr>
</tbody>
</table>
Assorted Syllables

cab  ace  wait  jerk  table  baby  me  path
pipe  sea  idle  firm  sit  rope  go  boat
gurgle  crush  oil  tart  unit  cute  ripple

Closed  Open  VCe

Vowel Team  Vowel-R  -Cle
Syllable Combining

plete  pre  sa  sal

t  con  -y  view
com  in  ute  geal
What Are the Ending Rules? ("Silent E Meets Its End")

1) Silent –e

<table>
<thead>
<tr>
<th>Word</th>
<th>Ending Rule</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>use + ed</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>drip + ing</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>waste + ful</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>mat + ed</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>smoke + less</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>prep + ed</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>hope + ed</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>fill + ed</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>mope + ing</td>
<td></td>
<td>______</td>
</tr>
<tr>
<td>host + ing</td>
<td></td>
<td>______</td>
</tr>
</tbody>
</table>

2) Doubling
Proofreading for Endings

The Sand Which Was There

Thunker was cuting a huge peper and smokeed bovine snout sandwich in half when his cell phone starteed ringging. Thunker startted taping his head, hopping to remember where he last put the phone. Suddenly, Thunker droped his sandwich and went runing upstairs.
Roy Doyle was an oyster hoister employed by the Royal Oyster and Cracker Crumb Company. In his oilcloth slicker and soiled boots, Doyle toiled in the moist mud flats of Troy. There he foisted himself upon countless oysters that he annoyed and destroyed as he hoisted them from their warm and oozy beds. Doyle enjoyed hoisting oysters from the moist mud of Troy.
Review: Spelling Lesson Routines

- Phonemic Awareness
- Concept Study
- Guided Word Sorts, Timed Sorts
- Dictation (Spelling in Context)
- Speed Drills and Proofreading (Orthographic Attention Enhancement!)
- Writing!
What’s a morpheme?
A meaningful word part, usually a prefix, root, or suffix, or parts of a compound.

non re tract able
sub tract ing
at tract ion
tele con fer enc(e) es
un dif fer ent iat(e) ed
trans fer(r) able
## Historical Layers of English

<table>
<thead>
<tr>
<th>Layer</th>
<th>Morpheme Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo-Saxon</td>
<td>Base words (<em>earth, moon, star, sun</em>)</td>
</tr>
<tr>
<td></td>
<td>Compounds (<em>nightcrawler</em>)</td>
</tr>
<tr>
<td></td>
<td>Inflections (<em>darkest, darker, parked, parking</em>)</td>
</tr>
<tr>
<td></td>
<td>Suffixes (<em>neighborhood, hapless</em>)</td>
</tr>
<tr>
<td>Latin</td>
<td>Prefixes (<em>peri; anti; pro; de; sub</em>)</td>
</tr>
<tr>
<td></td>
<td>Roots (<em>cred; fect; vis</em>)</td>
</tr>
<tr>
<td></td>
<td>Suffixes (<em>stimulus, perilous, trivial</em>)</td>
</tr>
<tr>
<td></td>
<td>Latin plurals (<em>alumni, data, vertebrae</em>)</td>
</tr>
<tr>
<td>Greek</td>
<td>Combining forms (<em>neuro-bio-logic-al</em>)</td>
</tr>
<tr>
<td></td>
<td>Plurals (<em>crises, metamorphoses</em>)</td>
</tr>
</tbody>
</table>
Two Types of Suffixes

inflections:
– learned early
– do not change a word’s part of speech
– a fixed set or class of words
– change tense, number, and degree (-ed, -s, -er)

derivations:
– added to a root (usually from Latin)
– mark part of speech or grammatical role
  (compare, comparison, comparative, comparatively)
A monkey in a zoo has
trainers they have to share
a cage with another monkey.
A monkey in a rainforest does
not need a cage they
do not need trainers.
They are alike because
they are both a monkey
and living food have tails and
have a body and are cute.
And they can bee different
still because they can have
different collars since and does
not have clause.
<table>
<thead>
<tr>
<th></th>
<th>/d/</th>
<th>/t/</th>
<th>/əd/</th>
<th>New Syllable</th>
</tr>
</thead>
<tbody>
<tr>
<td>moved</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wowed</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>stalked</td>
<td></td>
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<tr>
<td>hissed</td>
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<tr>
<td>hissed</td>
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<td>shifted</td>
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<tr>
<td>mended</td>
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</tbody>
</table>
Dictation Exercises

Provide practice using study words, irregular words, and review words.

Frequent, distributed practice is best (several sentences a day).

- Immediately correct dictated sentences together.
Take a Tour of Spelling Territory
References


Javernick & Moats, *Spelling by Pattern*. Sopris West.


